THE CALFED BAY-DELTA PROGRAM

2005

ANNUAL REPORT

CALFED Bay-Delta Program Agencies

California

The Resources Agency
- California Bay-Delta Authority
- California State Parks
- Department of Water Resources
- Department of Fish and Game
- The Reclamation Board
- Delta Protection Commission
- Department of Conservation
- San Francisco Bay Conservation and Development Commission

California Environmental Protection Agency
- State Water Resources Control Board

California Department of Health Services

California Department of Food and Agriculture

Federal

Department of the Interior
- Bureau of Reclamation
- Fish and Wildlife Service
- Geological Survey
- Bureau of Land Management

Environmental Protection Agency
Army Corps of Engineers

Department of Agriculture
- Natural Resources Conservation Service
- Forest Service

Department of Commerce
- National Marine Fisheries Service (NOAA Fisheries Service)

Western Area Power Administration

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The CALFED Bay-Delta Program

The CALFED Bay-Delta Program is a unique collaboration among 25 state and federal agencies that came together with a mission: to improve water supplies in California and the health of the San Francisco Bay-Sacramento-San Joaquin River Delta Watershed. In 2000, the collaborative known as the CALFED Program drafted a 30-year plan described in the CALFED Program Record of Decision or ROD. This plan set general goals and laid out a science-based planning process through which CALFED Program agencies were able to make better, more informed decisions on future projects and programs within their purview.

Two years later, the California Legislature passed the California Bay-Delta Authority Act that adopted the plan's objectives as state policy. The legislation also created a new state agency, the California Bay-Delta Authority (CBDA), to oversee the program's implementation. The plan was adopted as the general framework for the CALFED Program's federal partners by Congress in 2004. Now, yet another chapter in the CALFED Program's life is being written as a new schedule is being drafted for the ROD and new ways of doing business are being woven into an improved framework through which the CALFED Program will work. These changes, the result of an independent review initiated to refocus and revitalize the CALFED Program, are aimed at making the organization more responsive and vital to its mission. CBDA will still provide the forum for the CALFED Program partners to share information, resolve disputes, measure progress and maintain a shared vision of the future for the Bay-Delta – but through new eyes that will allow each agency to better meet its individual and collaborative responsibilities.

From the Chairman ...

The Year 2005 was important for the CALFED Program. Although viewed as a national model for collaborative resource management with numerous successes to its credit, criticism has arisen over lack of progress in some areas and the inability to be prepared to deal with crises that have arisen, such as the continuing decline of pelagic organisms in the Delta.

Concerned over criticisms of the CALFED Program, but with a firm belief in its promise, Gov. Arnold Schwarzenegger requested in May that three processes take place to allow the CALFED Program to move forward and focus on addressing the highest priority conflicts in the Delta. His request resulted in:

- An independent fiscal and management review;
- A review of program governance and accountability; and
- A review of program structure and stakeholder responsiveness.

These actions were finalized in November after seven months of study by the state Department of Finance, the Little Hoover Commission and private consultants KPMG. The analysis and recommendations by these organizations will formulate the focus of a 10-Year Action Plan developed by CBDA with its state and federal partners that will become a blueprint for a revitalized and refocused CALFED Program that is better able to solve water conflicts in the Bay-Delta.

Gary Hunt
Chairman
California Bay-Delta Authority
Bay-Delta Public Advisory Committee

From the Lead Scientist ...

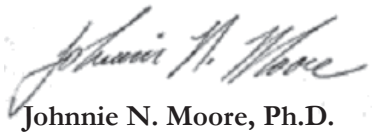
The Bay-Delta system (San Francisco Estuary, Sacramento-San Joaquin Delta, and upstream watersheds) is an incredibly complex system. All aspects of the system are being changed by human actions and natural processes at many different time and spatial scales.

Although we expect natural systems to vary within predictable ranges, this is not always the case. Continued forcing of systems can push them to a "tipping point," where small changes can cause large, unpredictable responses. These nonlinear step changes are exceedingly difficult to model or predict. Because of such complexities, we have developed a false certainty of our ability to manage the Bay-Delta system as important changes (e.g., continued population growth, resource use and projected climate change) occur in California.

This will require viewing the Bay-Delta system as a process (a system that evolves over time through the interaction of historic, environmental and demand factors) rather than as a state (a system at a single point in time, not as a process evolving over time). This means there can never be a "static master plan" for California water or the Bay-Delta—there will always be too much change and too many unknowns. Instead, there must be a dynamic approach to deal with future changes and devise a successful management strategy to meet the goals of the CALFED Program ROD.

The role of the CALFED Science Program in all this is to assure that world-class science is used throughout the CALFED Program agencies. That requires reviewing science and science practices and funding science to address unknowns.

Because of this mission, one main goal of the Science Program is to assure independent scientific review of all CALFED Program activities. The Science Program maintains autonomy from the overall CALFED structure by the oversight and review of the CBDA Board, the Independent Science Board and a separately supported Lead Scientist position through the U.S. Geological Survey. The Science Program uses its independent status to help provide unbiased and authoritative knowledge relevant to CALFED Program actions and communicate that knowledge to the broader community. This independence is crucial. Without it we will never be able to anticipate the "extraordinary surprises" that will be dealt to the citizens of California in the future.



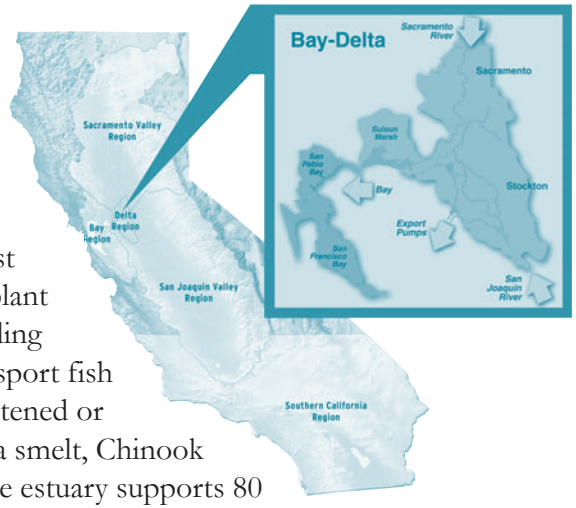
Johnnie N. Moore, Ph.D.
University of Montana
Lead Scientist
CALFED Program

Bay-Delta Program Overview

Why Focus on the Bay-Delta?

The San Francisco Bay-Sacramento/San Joaquin Delta is arguably the most valuable piece of real estate in California. The 1 percent of land-mass it occupies is the water engine that keeps the world's sixth largest economy running. This tiny wedge of land is what powers the state's trillion-dollar economy, including its $31 billion agricultural industry that supplies one-half of the nation's fresh fruits and vegetables.

Set against this backdrop, it is easy to see why the Bay-Delta is one of California's unique and valuable resources: it provides drinking water for 22 million people and truly makes the difference between a glass of water that is full and one that is not. The Delta's levees protect farms, cities and schools. As the largest estuary on the West Coast, it is home to 750 plant and animal species, including waterfowl, birds of prey, sport fish and species listed as threatened or endangered, such as Delta smelt, Chinook salmon and steelhead. The estuary supports 80 percent of California's commercial salmon fisheries.



While the Bay-Delta's importance to California is undeniably great, so are its needs. The health of the Bay-Delta's ecosystem has been in decline for decades, placing important fish, wildlife and plant species at risk. Human impacts, including growth and development, have increased the demand for water supply and water quality. This has created urgency for CALFED Program agencies working with local partners to implement hundreds of improvement projects. The dynamic nature of the Bay-Delta ecosystem, however, will continue to create challenges for CALFED Program agencies and local partners to create a plan for the Bay-Delta that will be responsive to the needs of the Delta and the people of California.

The CALFED Bay-Delta Program

The CALFED Program agencies issued the programmatic ROD in August 2000 that set forth a 30-year plan to address ecosystem health and water supply reliability problems in the Bay-Delta. The ROD laid out specific actions and investments to meet CALFED Program goals and described an implementation strategy. Through the ROD, the CALFED Program addresses four interrelated, interdependent resource management objectives concurrently:

- Water Supply Reliability
- Water Quality
- Levee System Integrity
- Ecosystem Restoration

The Record of Decision lays out specific actions and investments to meet CALFED Program goals and describes implementation strategies for the Plan.

These four objectives are further expanded through 11 major program elements to maintain program balance and a comprehensive approach. The following is a summary of the major components of the CALFED Program:

Water Supply Reliability

- Assist local partners in developing 500,000 to 1 million acre feet of groundwater storage;
- Pursue planning and other actions at state and federal levels to expand surface storage capacity by up to 3.5 million acre-feet to increase water supply, improve water quality and support fish restoration efforts;
- Optimize water conveyance facilities in the Delta and other locations to maximize operational flexibility, protect water quality and fish species, and increase water supply and reliability;
- Invest in local projects that boost water use efficiency through annual water conservation and recycling competitive grants and loans; and
- Streamline the water transfer approval process and develop an effective water transfer market that protects water rights, the environment and local economies.

Water Quality

- Develop and implement source control and drainage management programs;
- Invest in treatment technology;
- Implement aggressive measures to improve Delta water quality and water quality science;
- Improve or maintain water and sediment quality to support healthy and diverse aquatic ecosystems and to the extent possible, eliminate toxic impacts to aquatic organisms, wildlife and humans; and
- Improve dissolved oxygen condi tions in the San Joaquin River near the Port of Stockton as part of ecosystem restoration efforts.

Levee System Integrity

- Maintain and strengthen Delta levees, provide protection and enhancement of Delta habitats and drinking water quality;
- Develop best management practices for beneficial reuse of dredged material; and
- Improve the Delta Emergency Management Plan and develop a risk management strategy to identify risks to Delta levees, evaluate consequences and recommend actions.

Ecosystem Restoration and Watershed Management

- Restore habitat in the Delta and its tributary watersheds;
- Improve salmon spawning and juvenile survival by augmenting stream flow in upstream areas through voluntary water purchases of up to 100,000 acre feet annually for native fish;
- Improve fish passage through modification or removal of dams, improved bypasses, screens and ladders;
- Integrate flood management and ecosystem restoration;
- Build local capacity to assess and effectively manage watersheds that affect the Bay-Delta system; develop watershed assessments and plans; implement specific watershed conservation, maintenance and restoration actions;
- Prevent, control and eradicate invasive species; and
- Recover and assist recovery of certain species listed under the federal and state endangered species acts, and maintain status of other species identified by the CALFED Program.

Environmental Water Account

- Manage an Environmental Water Account to provide benefits to fish as well as water supply reliability to farms and cities;

Science

- Establish the Independent Science Board to integrate world-class science into implementation;
- Implement comprehensive monitoring and research programs; develop performance measures and indicators to evaluate program accomplishments; and
- Communicate the state of knowledge to CALFED Program agencies, partners, stakeholders and the public.

Oversight and Coordination

- Develop and implement a program tracking system to ensure ac countability and assess progress;
- Submit an annual report to the Legislature and Congress to assure balanced progress in meeting goals;
- Establish a public advisory committee and ensure public involve ment in implementation; and
- Address environmental justice and tribal needs associated with implementation.

Overall progress and accomplishments

This year's Progress Report differs slightly from previous years in that it recognizes that many of the schedules established in the ROD have been substantially delayed. Some of the schedules were unreasonable at the outset. Other delays have been due to unforeseen circumstances that have played out since the adoption of the ROD, including inadequate funding and lack of funding flexibility, pelagic organism decline (POD), contracting issues and hiring freezes.

In addition, it is obvious that the progress of the CALFED Program to date has not met the expectations of any of the major constituencies. Many of the levees in the Delta are inadequate to provide long-term protection to Delta resources and the state's water supply. Increasing the level of Delta levee protection would entail huge expenditures and may not significantly reduce levee failures. The gains envisioned in the Delta ecosystem have not been reached and threatened fish species, such as the Delta smelt, have shown recent precipitous declines. Water quality improvements have been few and far between as a result of funding shortfalls. There have been gains in water supply reliability, but the reliability may be fragile in light of the recent declines in Delta fish populations and the lack of progress on conveyance systems. To some constituents there is reasonable evidence that this reliability has come at the expense of the environment, and that the proposed increases in water exports from the federal and state projects in the Delta will intensify these impacts.

On the other hand, a number of water agencies, notably the federal contractors on the west side of the San Joaquin Valley, believe that water supplies promised to them have been unfairly reduced to satisfy environmental demands. Other water agencies worry that their existing and future water supplies are threatened by environmental water demands and increased Delta exports, or that they may be "taxed" to support environmental restoration or the construction of new projects from which they do not believe they will receive commensurate benefit.

While many Program accomplishments have been achieved, and much good work has been completed to date, the Program has not realized the progress or desired outcomes expected in each of the four CALFED Program objectives: levee system integrity, ecosystem restoration, water quality and water supply reliability.

Under these circumstances, state and federal water and resource leaders will need to make difficult choices, likely disappointing some constituencies without pleasing others, at least to the same degree. This year, as a result of the Governor's plan to revitalize the CALFED Program, CBDA staff and the implementing agencies prepared the previously discussed 10-Year Action Plan.

In spite of the schedule delays, CALFED Program agencies, with the support of BDPAC and the Authority Board, have made substantial progress implementing the CALFED Program during its first five years and have sizable accomplishments to report for Year 5.

Conveyance-progress and accomplishments

Implementing Agencies: U.S. Bureau of Reclamation, California Department of Water Resources

The continued guidance of the Science Program has led to additional information regarding the movement of fish, water, sediment and salt in the Delta. The information will help guide operations of Delta facilities to better protect fish and water quality while providing reliable water supplies. The proposed Conveyance actions are continuing the planning phase of their development, including several components linked to the Delta Improvements Package, such as: increased State Water Project (SWP) permitted pumping capacity from the Delta to 8,500 cfs; construction of permanent operable gates in the South Delta; construction of an intertie between the SWP and the Central Valley Project (CVP); the Delta Cross Channel Re-operation and the Through-Delta Facility (TDF) study. Temporary barriers continue to be installed in the South Delta and construction of the Delta Mendota Canal/California Aqueduct (DMC/CA) Intertie is pending.

In Year 5, the CALFED agencies have:

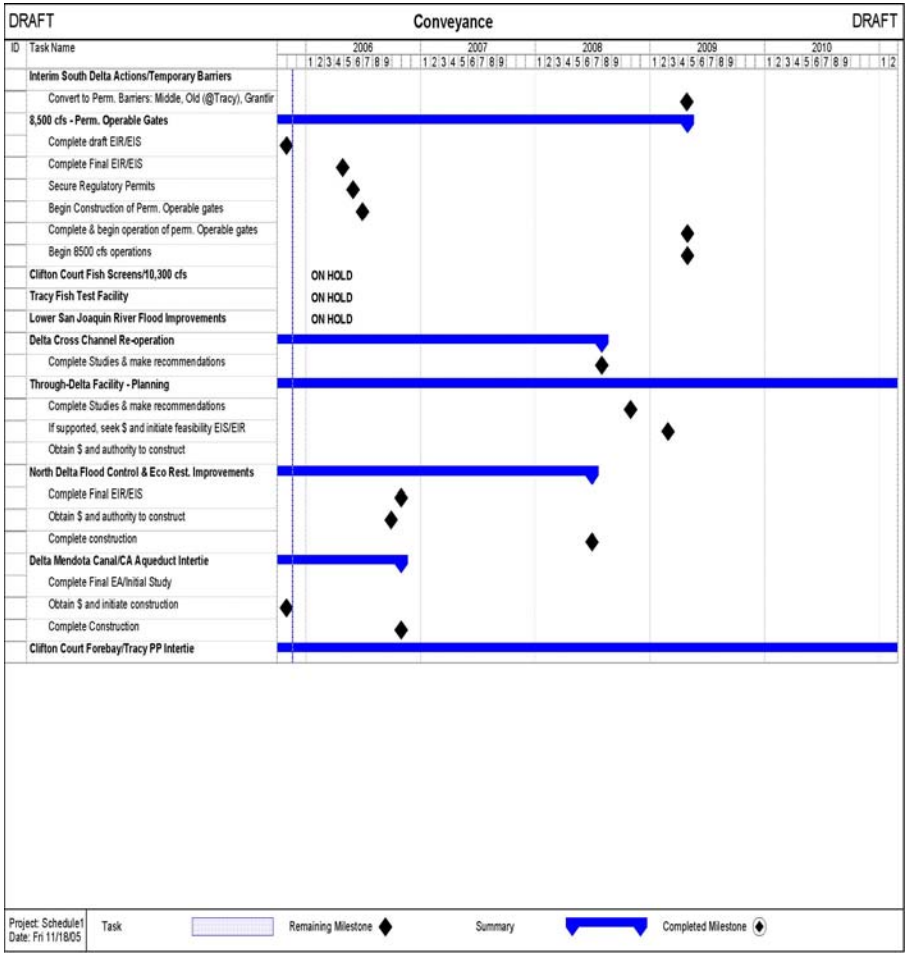
- Prepared and released a draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) on installing Permanent Operable Gates and increasing permitted SWP pumping capacity to 8,500 cfs; Stage 1 includes a decision on the physical/structural component under the existing operational rules, including the permitted limit for SWP diversions. Stage 2 includes a decision on the selection of the preferred operational component based on operational scenarios presented in the draft EIS/EIR;
- Completed an environmental assessment and Initial Study for the DMC/CA Intertie Project and a final design of a 450 cfs intertie;
- Started a multi-year hydrodynamic study to better understand the movement of water, fish and water quality in the South Delta and at the Delta Cross Channel to determine the feasibility of implement ing operational, as well as physical, improvements to protect fish and water quality in the Delta;
- Initiated fish collection, handling, transportation and release studies to better understand the affect of SWP and CVP fish salvaging facilities on Delta smelt and evaluate potential improvements in salvaging techniques;
- Completed studies on the swimming and passage performance of adult sturgeon for a potential TDF;
- Initiated a pre-feasibility study on the technical viability of alternatives for a TDF; and
- The South Delta Fish Facility Forum finalized a report containing recommendations on fish facility improvements at Tracy and Clifton Court.

The goal of the Conveyance Program is to identify and implement conveyance modifications that will improve water supply reliability in drinking water quality and complement ecosystem restoration.

Conveyance Program: South Delta Actions	
Key ROD Commitment	**Year 5 Accomplishments**
Increase water deliveries to SWP and CVP water contractors south of the Delta by increasing the maximum diversion through the existing intake gates at Clifton Court Forebay to 8,500 cfs to allow greater use of SWP export capacity, and install permanent operable gates in the South Delta.	• A draft EIR/EIS was released in November 2005.
Increase SWP pumping to the maximum capability of 10,300 cfs.	• All planning activities, except for fish facility and hydrodynamic studies, were placed on hold pending the recommendations by the South Delta Fish Facilities Forum.
Increase fish protection by improving fish screening at CVP and SWP export facilities.	• Laboratory evaluations have been conducted on a Tracy Fish Test Facility fish sorting and holding tank physical model, whole facility evaluation, predator tracking, recessed holding tank stress tests, improved debris management and fish movement using sonar. • A new building and expansion of the University of California, Davis (UCD) aquaculture facility at the SWP's Skinner Fish Collection Facility was completed to conduct fish collection, handling, transportation and release studies using Delta smelt. • Started a multi-year hydrodynamic study to better understand the movement of water, fish and water quality in the South Delta and at the Delta Cross Channel. • Initiated fish collection, handling, transportation and release studies to better understand the affect of SWP and CVP fish salvaging facilities on Delta smelt and evaluate potential improvements in salvaging techniques.
Design and construct floodway improvements on the lower San Joaquin River to provide conveyance, flood control and ecosystem benefits.	• Opportunities for the development of conceptual flood improvements as identified in the internal draft Comprehensive Study Lower San Joaquin River Assessment Information Report (October 2001) were discussed with various organizations in the project area, including the San Joaquin River Task Force. • Local flood control agencies have proposed a flood control improvement project for consideration.

Conveyance Program: North Delta Actions	
Key ROD Commitment	**Year 5 Accomplishments**
Evaluate and implement improved operational procedures for the Delta Cross Channel to address fishery and water quality concerns.	• A Delta Cross Channel Pilot Study was conducted to test new technologies for measuring river velocity structures and the movement of juvenile salmon.
Evaluate a screened Through-Delta facility on the Sacramento River of up to 4,000 cfs.	• Studies were initiated on the swimming and passage performance of adult sturgeon at UCD, and fish passage at the Sacramento Deep Water Ship Channel. These studies were completed in June 2005. • A board weir structure was constructed in the Yolo Bypass toe drain to evaluate fish passage alternatives. This study is being discontinued for lack of potential value to the design of a TDF fish passage facility. • A pre-feasibility study on the technical viability of alternatives for a TDF was initiated. Progress on this study has been slow due to a lack of staff and contracting problems.
Design and construct floodway improvements in the North Delta.	• Progressed significantly in preparing environmental document including alternatives refinement, conceptual design preparation and impact analysis. • Continued work with agency staff and academic science panel to provide science advice for alternatives development and project planning. • Progressed in sediment dynamics studies, including sampling and draft report.

Conveyance Program: Delta Mendota Canal/California Aqueduct (DMC/CA) Intertie Actions	
Key ROD Commitment	**Year 5 Accomplishments**
Connection between the CVP Delta Mendota Canal and SWP California Aqueduct west of the city of Tracy.	• Completed NEPA/CEQA review. FONSI (Finding of No Significant Impact) was signed in May 2005. Negative Declaration was signed in April 2005. • Completed the final design of the project. • Construction contract was initiated.
Intertie between the CVP intake facility and SWP's Clifton Court Forebay with a corresponding increase in the capacity of the Forebay's screened intake.	• Work on this project is not expected to begin until Year 7.
Complementary Actions: Objectives that were not analyzed in the final Programmatic EIS/EIR.	
Key ROD Commitment	**Year 5 Accomplishments**
The Temporary Barriers Project will seasonally install up to three rock flow control structures and one rock fish control structure in South Delta channels at various times through 2007.	• Three portable pumps were installed on Union Island to mitigate the effects of the barriers upstream of these diversions. Portable pumps were also installed to assist agricultural diversions into Tom Paine Slough. • Obtained ACE permit to conduct limited dredging and modify agricultural diversion on Union Island along Old River. Nine diversions were included in the project that began in August 2004 and was completed in October 2004. • A hyacinth removal project began in Tom Paine Slough in early December 2004 and completed in January 2005. Removal of the aquatic plants that have infested the slough should help improve irrigation water conveyance and reduce reliance on portable pumps in 2005 and beyond.



Environmental Water Account-progress and accomplishments

Implementing Agencies: California Department of Fish and Game, California Department of Water Resources, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service and U.S. National Marine Fisheries Service (NOAA Fisheries Service)

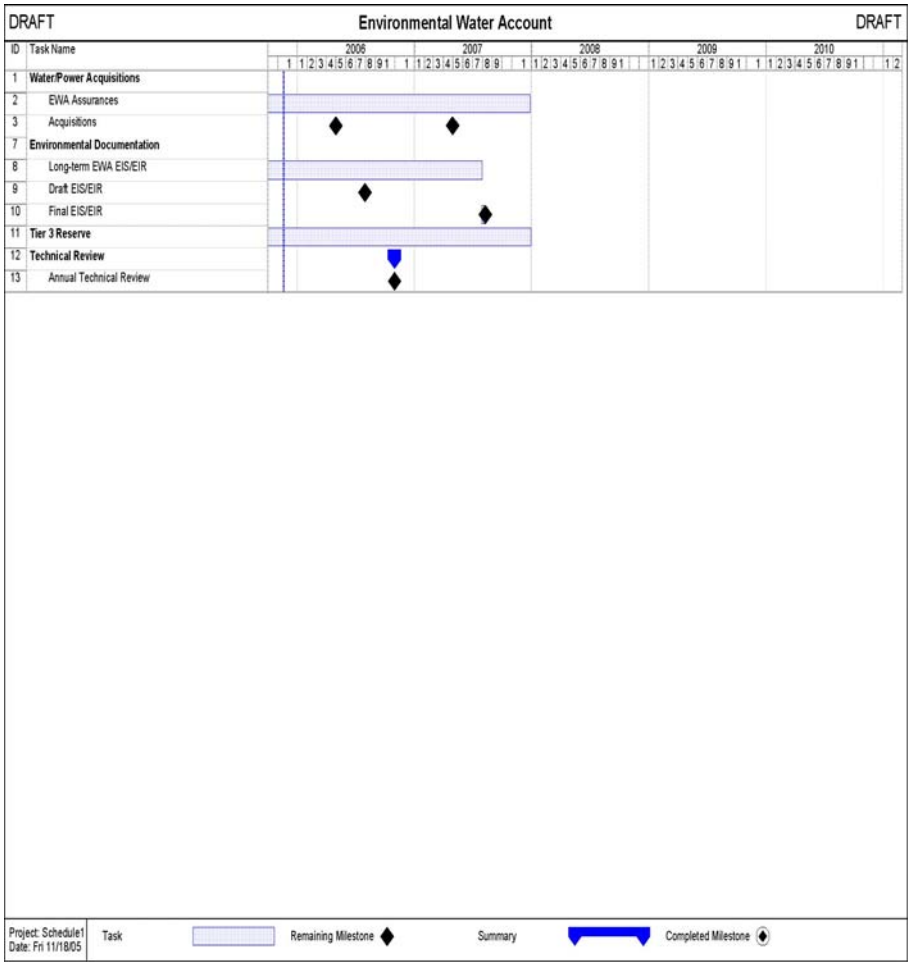
During its first five years [1], the Environmental Water Account (EWA) acquired approximately 1.1 million acre feet of water (purchases and exchanges) from willing sellers at a cost of approximately $155 million. In addition to water purchases, the EWA agencies acquired approximately 0.4 million acre-feet of operational assets (surplus water pumped from the Delta). Thus, combining water purchases with operational assets, the EWA agencies acquired a total of approximately 1.5 million acre-feet of water for fish protection measures, while maintaining CVP and SWP water deliveries to farms and cities.

In March 2004, final environmental documents and a Record of Decision and Notice of Determination were completed for the acquisition and management of EWA assets between 2004 and 2007; preparation of another environmental document for the acquisition of EWA assets beyond 2007 until 2030 continues. Also in 2004, the EWA agencies, in accordance with the CALFED Program ROD, completed an evaluation of the efficacy of the EWA during its first four years of implementation and signed an MOU to extend the EWA Operating Principles Agreement and continue implementing the EWA through December 31, 2007.

Environmental Water Account (EWA)	
Key ROD Commitment	**Year 5 Accomplishments**
Manage an EWA to provide benefits to fish, as well as water supply reliability to farms and cities.	In Year 5[1], the EWA agencies acquired approximately 151,000 acre-feet (TAF) of water from willing sellers (via purchases and exchanges) and 149 TAF of operational assets, via surplus water pumped from the Delta, for a total of approximately 300 TAF for fish protection measures, while maintaining water deliveries to farms and cities; the cost for water purchases and exchanges was approximately $22 million. EWA agencies carried over into Year 6 a debt of approximately 39 TAF, which was later extinguished in December 2005. During Year 5, the EWA agencies used water to improve or evaluate juvenile salmon survival in the Delta during winter (Delta Action 8) and spring (Vernalis Adaptive Management Program [VAMP]) and to reduce export pumping impacts to Delta smelt. EWA actions in water year 2005 were: • 4.2 TAF in December to benefit winter-run Chinook • 44.3 TAF in February to benefit Delta smelt • 121.9 TAF in April to benefit Delta smelt • 134 TAF in May to benefit fall-run Chinook and Delta smelt • 34.7 TAF in June to benefit fall-run Chinook and Delta smelt These numbers are preliminary, pending completion of the year's final accounting. DWR and Reclamation entered into a partnership with Yuba County Water Agency, state and federal fishery agencies, and the SWP and CVP contractors that will result in long-term water supplies for EWA.

[1]The EWA operates in accordance with California's water year (October 1 through September 30).

The Environmental Water Account was established to provide water for the protection and recovery of at-risk fish species beyond water available through existing regulatory actions related to the operations of the SWP and the CVP.



Storage-progress and accomplishments

Implementing Agencies: U.S. Bureau of Reclamation, California Department of Water Resources

Work has progressed on surface storage investigations for all five projects. DWR and the Bureau of Reclamation (Reclamation) released the CALFED Program Surface Storage Investigations Progress Report in April 2005. The report notes that initial alternatives information reports have been completed for the Shasta Lake Water Resources Investigation (SLWRI), Upper San Joaquin River Basin Storage Investigation (USJRBSI) and Los Vaqueros Reservoir Expansion (LVRE), and are under way for North of Delta Offstream Storage (NODOS). A state draft feasibility report was completed for the In-Delta Storage Project (IDSP). Additionally, environmental compliance activities are underway for NODOS, SLWRI and USJRBSI. Environmental documents have been completed for IDSP; however, supplemental documents are anticipated. Finally, the Progress Report notes that the CALFED Storage Program is refining project alternatives and evaluating the level of potential participant interest. Potential state and federal benefits that need to be explored include broad public benefits provided by surface storage projects, such as EWA and ERP instream flows.

DWR has entered into 22 Memoranda of Understanding with local agencies throughout the state to provide technical, facilitation and financial assistance to plan and develop conjunctive water management programs and projects. Sixty-two groundwater storage and recharge grants and loans for feasibility studies, pilot projects and construction, were awarded $205 million dollars and 22 of them have been completed. An additional $45 million in grant funds were awarded for conjunctive use development in Southern California. The Local Groundwater Assistance Program awarded $27.8 million for 129 projects. Coupled with local cost shares for projects, total investment in the groundwater storage program totals over $1 billion. The projects are estimated to deliver 300,000-350,000 thousand acre feet (TAF) per year.

In Year 5, CALFED Program agencies:

- Completed a supplemental report in response to written and public hearing comments received on the 2004 In-Delta Storage Program State Draft Feasibility Study. The 2004 Jones Tract flooding event allowed DWR to collect information on property damage, seepage to adjacent islands and drinking water quality impacts for use in future modeling studies;

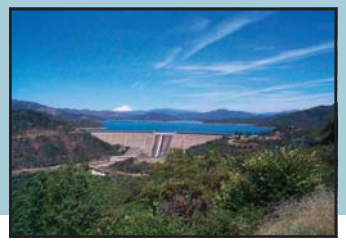
- Filed a Notice of Intent to prepare the Shasta Lake Water Resources Investigation EIS. Six public scoping meetings were held to solicit input on topics to be addressed in the integrated SLWRI planning report and EIS, including resources to be evaluated, alternatives to be considered and significant concerns and issues;

- Continued environmental field studies and water operation modeling for the LVRE and NODOS projects;

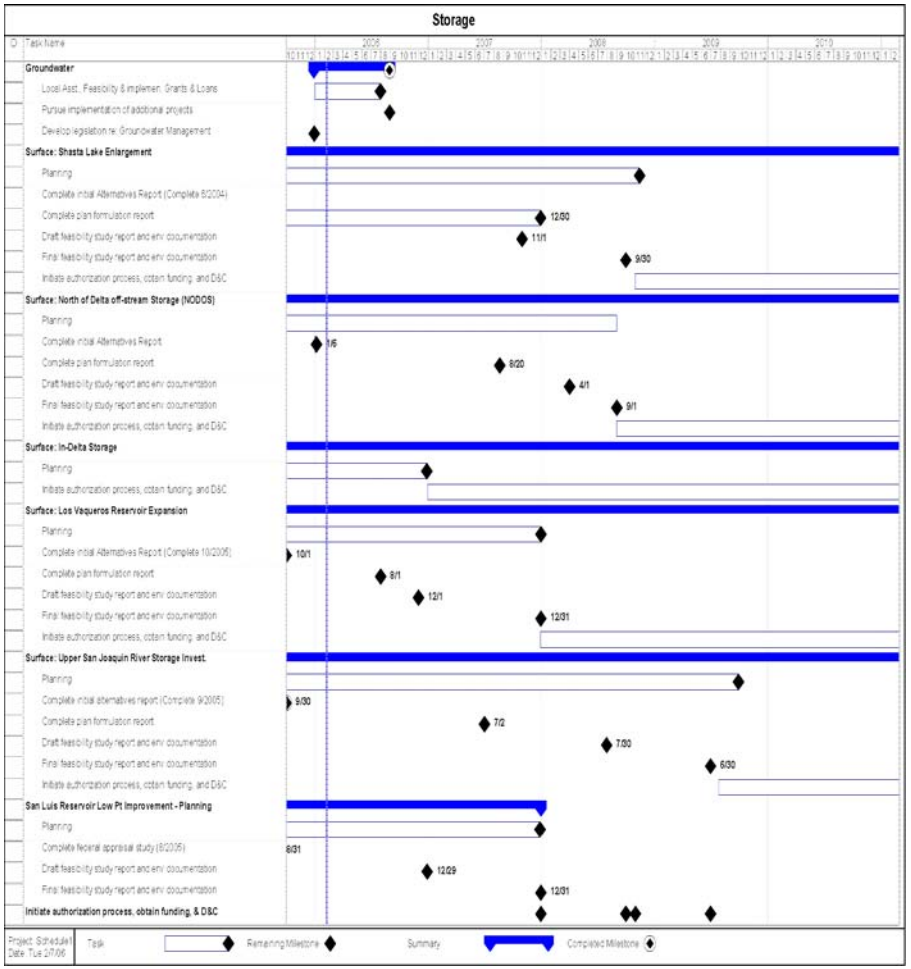
Expanding water storage is critical to the successful implementation of all aspects of the CALFED Program to meet the needs of a growing population and provide flexibility to improve water quality and support fish restoration efforts.

- Completed scoping report and an Initial Alternatives Information Report on USJRBSI;
- Developed a collaborative working relationship between the Santa Clara Valley Water District and the Delta Mendota Canal Authority aimed at defining "the without the project conditions" for an environmental documentation for the San Luis Reservoir Low Point Improvement Project. An appraisal report will be released be re leased in early 2006; and
- Awarded $6.4 million for 28 Local Groundwater Management Assistance feasibility studies/pilot projects.

Storage Program	
Key ROD Commitment	**Year 5 Accomplishments**
Development of approximately 250,000 TAF of In-Delta storage.	• Conducted two public workshops and received comments highlighting the need for investigations on water quality, risk analyses, project operations and economics. • Collected information on property damage, seepage to adjacent islands and drinking water quality impacts from the 2004 Jones Tract flooding event for use in future modeling studies. • Completed environmental surveys for the giant garter snake to fill data gaps. • Completed a State Feasibility Study Report in Year 5. Reclamation does not have federal feasibility study authority for the In-Delta Storage Investigation. The In-Delta Storage Investigation did not receive state funding in FY 2005.
Enlargement of Shasta Lake storage by approximately 300 TAF.	• Initial Alternatives Information Report (IAIR) was completed in 2004. • Initiated the National Environmental Policy Act (NEPA) process in Fall 2005. • Initiated field surveys and baseline for Habitat Evaluation Procedures (HEP).
Expansion of Los Vaqueros Reservoir by up to 400 TAF.	• Completed field surveys and baseline for HEP. • Completed a stand-alone and integrated CALSIM II model incorporating Los Vaqueros Expansion (LVE) operations. • Completed an Initial Alternatives Information Report in September 2005. • CCWD chose to be the California Environmental Quality Act (CEQA) lead agency.
Development of up to 1.8 million acre feet of North-of-the-Delta Offstream Storage.	• Completed biological and cultural resources field studies. • Completed draft descriptions of the affected environments of the EIR/EIS chapters. • Completed feasibility engineering study on reverse flow facilities for releasing water back to the river. • Completed feasibility engineering studies on dams and appurtenant structures, conveyance facilities and road relocations.



Storage Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Development of 250-700 TAF of storage in the Upper San Joaquin River Basin.	• Completed and released scoping report in December 2004. • Completed an Initial Alternatives Information Report in June 2005. • Invited 16 federal, state and local agencies as cooperating agencies via a memorandum of agreement. • Formed/initiated two Cooperating Agency Environmental Workgroups to assist with reservoir and downstream environmental issues as study proceeds.
Evaluate a bypass to the San Felipe Unit at the San Luis Reservoir to increase the operational flexibility of storage in San Luis Reservoir and ensure a high quality, reliable water supply for San Felipe Division contractors.	• Completed a draft of the Federal Appraisal Study in August 2005. • Initiated the plan of study in September 2005.
Other	• The Storage Program developed a Common Assumptions effort to standardize methods and models necessary for hydrologic, water quality and economic analysis. In January 2005, a comparable set of CALSIM II (a water resources simulations system) and DSM2 (a Delta simulations system) model runs of various operational scenarios were completed to assess the potential benefits of four of the five storage projects: SLWRI, NODOS, IDSP and LVE. • Surface Storage Progress Report No. 2 was released in April 2005. The report presents evaluations of several operational scenarios that demonstrate a range of potential benefits each project could provide.



Water Transfers-progress and accomplishments

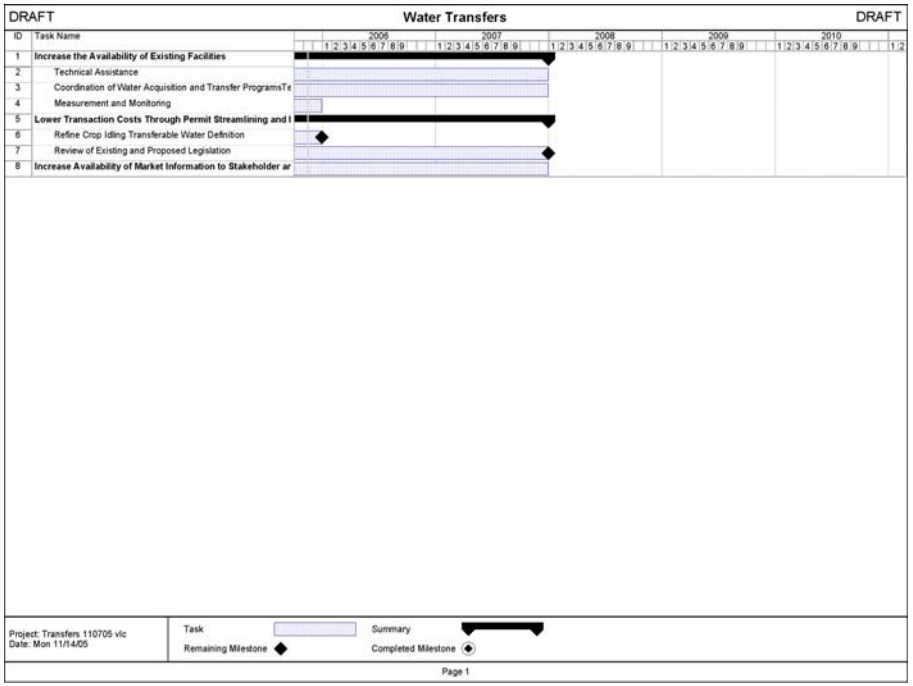
Implementing Agencies: U.S. Bureau of Reclamation, California Department of Water Resources, State Water Resources Control Board

In the first five years of the CALFED Program, more than 3.8 million acre feet of water was transferred for the EWA, DWR Dry Year Program, Central Valley Improvement Act (CVPIA) Transfers and the Colorado River Contingency Plan. In Year 5, CALFED Program agencies were able to track and assist in the transfer of about 300,000 acre feet of water, including water for EWA.

Water Transfer Program	
Key ROD Commitment	**Year 5 Accomplishments**
Increase the availability of existing facilities for water transfers: • Improve capacity estimates of state or federal conveyance facilities. • Improve predictability of associated wheeling costs. • Develop a mechanism for estimating carriage water requirements on a real-time basis. • Develop principles for reservoir refill.	• In Year 5, CALFED Program agencies were able to track and assist in the transfer of approximately 300,000 acre feet of water, including water for EWA. • Initiated discussions with state water contractors to explore storage potential for future water transfers. • Continued efforts to identify constraints and opportunities to convey transfer water through federal, state and local facilities. • Reclamation continued to allow the use of CVP storage to facilitate transfers of water between Sacramento Valley water users and water users south of Sacramento. • Legislation was dropped to facilitate wheeling transactions and to clarify the state's wheeling laws to increase availability of existing facilities for water transfers. After reviewing existing law, the determination was made that no further legislation was required.
Lower transaction costs through permit streamlining: • Identify measures to streamline transfer approval processes of jurisdictional agencies. • Define transferable water associated with crop idling. • Identify potential impacts to third-parties and develop mechanisms for appropriate compensation. • Work with the stakeholder community to develop agreed-upon approaches to monitoring and mitigation.	• Reclamation developed an accelerated water transfer program to streamline the administrative review and approval process for intra-divisional CVP water transfers. Reclamation continues to work with CVP contractors to expand this process to include inter-divisional transfers, as well as exchanges with non-CVP contractors. • Worked with several individuals and small water districts to aid in preliminary evaluation of water transfer potential. Provided preliminary evaluations of potential amounts of water available for transfer, and documentation and process required to make a formal proposal. • Continued to discuss and consider measures to streamline and expedite the various agency water transfer approval processes, including: – Adopting a standard water transfer application. – Establishing limits for processing transfer applications. – Establishing suitable criteria for approving land idling-based transfers. – Clarifying procedures for transfers for in-stream purposes under Water Code Section 1707.

The goal of the Water Transfer Program is to facilitate water transfers and streamline the approval process while protecting water rights, environmental conditions and local economic interests.

Water Transfer Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Lower transaction costs through permit streamlining: (cont.)	• Provided financial and technical assistance for preparing groundwater management plans. • Continued to work with the affected stakeholder community to encourage coordination of multiple transfers and identification of standard mitigation measures and thresholds to address third-party socioeconomic consequences. • Continued to work with representatives of the stakeholder community to develop common approaches to mitigation and monitoring. • Due to state budget constraints the following activities were suspended as of July 2005: – Development of guidance documents on how to structure a transfer, including permitting, which was helpful in lowering transaction costs through permit streamlining. – Identification of transfer capacity at existing facilities. – Updating of the crop water consumption values. A stakeholder streamlining panel, which had been established and expanded to include interested parties downstream of the Delta.
Increase availability of market information to stakeholders and permitting agencies: • Provide operational On-Tap website. • Establish California Water Transfers Information clearinghouse.	• Continued to maintain On-Tap database. • Began process of quality assurance and quality control of the database. • Identified database limitations and began process of implementing upgrades. • On-Tap database and Water Transfer Clearinghouse developed and maintained by DWR were suspended as of July 2005 due to state budget constraints. The On-Tap database included 3,685 transactions going back to the late 1980s, and was receiving about 3,000 hits per month before it was suspended.
Complementary Action: Objectives that were not analyzed in the final Programmatic EIS/EIR.	
CALFED Program agencies will develop and support proposals to remove disincentive to voluntary deployment of water use efficiency improvements.	No longer deemed applicable to the Water Transfer Program, therefore no proposals were developed.



Water Use Efficiency-progress and accomplishments

Implementing Agencies: State Department of Water Resources, State Water Resources Control Board, U.S. Bureau of Reclamation, U.S. Natural Resources Conservation Service

In its first five years, 272 projects for agricultural and urban water conservation, and recycling and desalination were funded for a total of $904 million in local state and federal funds. The agricultural and urban grant recipients reported that they expected the projects to potentially yield 90,000 acre feet. Water recycling and desalination recipients reported they expect their projects to yield 387,000 to 510,000 acre feet and 20,000 acre feet, respectively.

In Year 5, CALFED Program agencies:

- Created and implemented the Water Management Science Board (WMSB);
- Developed and introduced administrative measures and legislation to implement Appropriate Water Use Measurement for agricultural and urban uses;
- Released agricultural and urban WUE, recycling and desalination grant solicitation packages;
- Awarded through the state, approximately $17 million for 47 urban conservation projects with an expected yield of about 31,000 acre feet; approximately $11.8 million for 28 agricultural conservation projects with an expected yield of about 29,000 acre feet; and approximately $25 million for 25 desalination projects with an expected yield of about 20,000 acre feet;
- Reclamation awarded approximately $1 million for agricultural water conservation grants and cooperative agreements and approximately $15 million for financial and technical assistance for water conservation, recycling and desalination;
- Awarded through the Natural Resource Conservation Service (NRCS) an estimated $5 million in cost-share incentive payments to encourage installation of water conservation practices; and
- Provided $3.7 million in technical assistance to local agencies.

The Water Use Efficiency Program goal is to accelerate implementation of cost effective water conservation and recycling practices that contribute to water supply reliability and quality, and Ecosystem Restoration Program goals.

Water Use Efficiency Program	
Key ROD Commitment	**Year 5 Accomplishments**
Assurances, Science, Monitoring, and Evaluation: Provide credible assurances to policymakers and stakeholders that the WUE Program is being implemented aggressively and in accordance with the ROD. Assurances are structured to ensure that appropriate efficiency measures are implemented. These assurances include limiting access to CALFED Program benefits and conditions on new storage facilities: • Support and inform sound water management decisions. • Verify results of WUE actions. • Develop quantified performance measures (including agricultural quantifiable objectives). • Engage in adaptive management.	In Year 5, CALFED Program agencies: • Created and implemented the Water Management Science Board. • Developed and introduced administrative measures and legislation to implement Appropriate Water Use Measurement for agricultural and urban uses. • Released agricultural and urban WUE, recycling and desalination grant solicitation packages. • The state awarded approximately $17 million for 47 Urban Conservation Projects, with an expected yield of about 31,000 acre feet; approximately $11.8 million for 28 Agricultural Conservation Projects, with an expected yield of about 29,000 acre feet; and approximately $25 million for 25 desalinization projects, with an expected yield of about 20,000 acre feet. • Reclamation awarded approximately $2.5 million for agricultural and urban water conservation grants and cooperative agreements, including technical assistance, in FY 2005. • NRCS provided an estimated $5 million in cost-share incentive payments to encourage installation of water conservation practices. • Provided $3.7 million in technical assistance to local agencies. Quantifiable Objectives: • Made progress on the development of WUE element performance measures through review of on-going science activities, including the incorporation of quantifiable objectives into agricultural water management plans and participation in Water Management Science Board in January of 2005. • Quantifiable objectives and targeted benefits are being incorporated in the Regional Plan being prepared by the Sacramento River Settlement Contractors.

Water Use Efficiency Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Assurances, Science, Monitoring, and Evaluation (cont.)	Water Measurement: • Developed an implementation approach for implementing appropriate water use measurement in an open stakeholder process. The Implementation Approach for Agricultural and Urban Water Use Measurement was approved by the Authority in April 2004 and subsequent legislation was drafted fulfilling a ROD commitment which had been scheduled for completion during the 2003 legislative session, but was delayed due to process and staff resources. Science and Monitoring: • DWR provided for the proposal and implementation process to be accessible to all agencies involved in water use efficiency activities and for incorporating more scientific measures into the program. DWR, CBDA and SWRCB were participants in the science and economic review of Proposition 50 WUE proposals. DWR, USBR and DHS were participants in the Water Desalination Agency Team reviewing and selecting proposals. • Developed the terms of reference for the Water Management Science Board and recruited 16 members. First meeting was held in January 2005, where work teams on modeling, water use efficiency and water quality were formed.
Conservation Projects: • Facilitate implementation of WUE actions at the local level – by cities, water suppliers and farmers. • Use state and federal grants to help local entities implement WUE practices that are not locally cost effective, but still contribute to CALFED Program objectives. • Use state low-interest loans to help local entities overcome financial barriers to WUE implementation.	Urban Conservation Projects: • Grants - PSP was developed for DWR's Proposition 50 Chapter 7 funding. The eligible projects are urban water conservation projects. Funding awards were made to 47 projects in June 2005 for a total of $16.9 million. A total of 106 proposals were received by DWR for review and selection. Originally this PSP was scheduled for release in 2003, but was delayed due to a request for including private entities as eligible for funding for the program and budget approval delays. The funding for Year 5 was re-appropriated from the previous fiscal year. Program implementation reflects beneficiary pays approach, including local cost share for implementation projects. • DWR continues to manage projects funded under Proposition 13 and SB 23.

The Water Use Efficiency Program funded 272 projects for a total of $904 million in its first five years, resulting in potentially 90,000 acre feet in agricultural and urban water conservation, up to 510,000 acre feet in water recycling and 20,000 acre feet in desalination yields.

Water Use Efficiency Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**

Conservation Projects (cont.):
• Develop partnerships with local and regional entities to:
  • Assess the costs, benefits and feasibility of potential WUE projects.
  • Determine the best approach to implement WUE actions.
  • Effectively prepare grant and loan applications.
  • Comply with WUE reporting requirements (e.g. related to urban water conservation certification).
	Agricultural Conservation Projects:
	• Loans - Funding was available but no loan applications were submitted to DWR.
	• Grants - PSP was developed for DWR's Proposition 50 Chapter 7 funding. The eligible projects are agricultural water conservation projects. Funding awards were made to 28 projects in June 2005 for a total of $11.7 million. Approximately $5.15 million of agricultural grant funds were unused and will rollover to future years. A total of 62 proposals were received by DWR for review and selection. Originally this PSP was scheduled for release in 2003, but was delayed due to request to include private entities as eligible for program funding, and due to budget approval delays. The funding for the Year 5 was re-appropriated from the previous fiscal year. Program implementation reflects beneficiary pays approach, including local cost share for implementation projects.
	• Approximately $2.5 million was awarded for water conservation grants and cooperative agreements in Reclamation's Mid-Pacific Region in FY 2005.
	• Developed and provided a report for an on-farm WUE incentive program. This report was based on six regional meetings that were held to gather producer's technical assistance and financial incentives needs. The report also included an evaluation of existing programs for on-farm technical and financial incentives of key agencies. Original due date was May 2003; however changes on concept delayed delivery to April 2005.
	• NRCS continues to implement the Environmental Quality Incentives Program (EQIP) (Category B), which provides cost-share incentive payments to encourage installation of water conservation practices. Funding available in EQIP for on-farm implementation is based on prior year estimates of EQIP practice cost-share expenditures that complement CALFED WUE Agricultural Water Conservation goals. FY 2005 estimate of $5 million is based on FY 2004 final estimated expenditures and FY 2005 initial allocations.

Water Use Efficiency Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**

• Conservation Projects (cont.):	Water Recycling Projects:
	• Grants (Includes Research Grants)
	• SWRCB Water Recycling Loans and Grants accomplishments for FY 2004-05 are as follows:
	  • A grant to the Water Reuse Foundation was approved in 2003 for a water recycling research program. For the period July 2004 through January 2005, $255,000 from this grant was approved for five projects.
	  • For the period July 2004 through June 2005, approved 16 grants totaling $1.1 million for facilities planning studies for water recycling projects using funds from Proposition 13 (2000 bond issue).
	  • Amended Water Recycling Funding Guidelines to include requirements for Proposition 50 (2002 bond issue) grant funding for construction of water recycling projects. Guidelines were released for public comment, workshops were held and CBDA endorsed the guidelines before adoption by the SWRCB.
	  • The Legislature appropriated $42 million for water recycling projects. Adopted a competitive project list of potential water recycling projects and accepted funding applications in January 2005 for Category 1 projects which are those that benefit the Delta. Grant applications qualifying for Proposition 50 funding were reviewed and approved for construction of water recycling projects. Implementation of this program incorporates a state funding share of 25 percent of eligible costs up to a maximum of $4 million.

Technical Assistance: • Provide technical assistance to help local entities overcome technical hurdles in water conservation and water recycling and desalination projects. • Support scientific research, public awareness on water conservation, water desalination and water recycling production and use.	Urban Technical Assistance: • Provided technical assistance to the California Urban Water Conservation Council (CUWCC), provided staff support to the CBDA Urban Water Use Measurement Staff Work Group. Supported CUWCC to conduct workshops and presentations throughout California on using the Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 (Water Supply Assessment and Water Supply Verification) to implement those bills.

Water Use Efficiency Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Technical Assistance (cont.): • Support development of water conservation and water desalination technologies and implementation of projects.	Urban Technical Assistance (cont.): • Continued to work with the CUWCC on development of a guidebook which was published in January 2005 for water supplier's preparation of the 2005 Urban Water Management Plans required by the Urban Water Management Planning Act. In cooperation with CUWCC, held nine workshops statewide to assist water suppliers in preparation of an Urban Water Management Plan. Worked on evapotranspiration controllers and published water use efficiency leaflets on landscape irrigation. Prepared urban water use efficiency strategy for the Water Plan update. Agricultural Technical Assistance: • Continued progress in agricultural water management planning and implementation of efficient water management practices in partnership with the California Agricultural Water Management Council (CAWMC). Refined and developed a more user-friendly and web-based Water Management Planning tool, as well as refined and completed a Model Water Management Plan. Continued integration and incorporation of quantifiable objectives into the water management planning and implementation process. Existing net benefit analysis was refined and completed through the cooperative agreement. Increased agricultural signatory membership to 60 agricultural water suppliers. Agricultural Water Management Council staff met with several potential signatories, conducted meetings and workshops as their outreach activities. CAWMC staff started publication of *Best Management* newsletter. Completed general audits of 29 water management plans and detailed audit of five water management plans that have been endorsed by the CAWMC. Continued administrative support to the CAWMC. Prepared agricultural water use efficiency strategy for Water Plan Update.

Water Use Efficiency Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Technical Assistance (cont.):	Agricultural Technical Assistance (cont.): • Monitored two new mobile laboratories. Though still in their infancy, the two labs have conducted 23 pump tests and 60 irrigation system evaluations. Provided assistance to existing mobile laboratories to provide assistance outside their service area. The intent of these evaluations is to show agencies that do not currently have mobile laboratories the benefits of the labs and encourage them to establish their own labs. • Reprinted and disseminated several water use efficiency brochures, articles and published the *Water Conservation News* semi-annually (http://www.owue.water.ca.gov/). • Assisted local agricultural water agencies in installing three new California Irrigation Management Information System (CIMIS) weather stations. Collected, processed, analyzed and disseminated CIMIS data to the public through the CIMIS web page. Provided trouble-shooting and technical assistance in maintaining the system and resolve problems with DWR and operator-owned CIMIS weather stations. Partnered with the University of California Cooperative Extension to conduct 11 workshops on irrigation scheduling and promoting CIMIS. Participated in several workshops throughout the state to inform the public about the CIMIS program, how to utilize CIMIS data, assist in agricultural and urban runoff reduction and how to become a CIMIS cooperator. Managed two Proposition 13 ET (evapotranspiration) controller projects. • Partnered with the California Urban Water Conservation Council (CUWCC) to promote and initiate the non-ideal site program. This program is designed to assist the urban water agencies with water management, runoff reduction and best management practices (BMP) implementation. Participated in CUWCC Landscape Sub-committee. • Contracted with UCD to develop ET zone maps for California using remote sensing and spatial interpolation methods and updating daily, to be made available to the public through the CIMIS web page. Released a new CIMIS web page to facilitate the increased demand for data, technical information and water management tools. Began beta testing new data acquisition platforms to provide more frequent CIMIS data updates.

Contracts with resource conservation districts provided farmers with technical assistance on new irrigation technologies and improved water management techniques.

Water Use Efficiency Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Technical Assistance (cont.):	Agricultural Technical Assistance (cont.): • Reprinted new state ET zone maps for distribution. Continued submitting publications to California Agricultural Technology Institute, *Water Conservation News*, and a scientific paper to the *ASCE Journal*. Installed weather station for DWR operations and climate data monitoring of the Jones Tract incident. Initiated investigation into the net radiation estimation used by CIMIS. • Developed user guides: Monitoring and Assessment of Canal Lining Water Savings, Monitoring and Assessment of On-Farm Improvements, Monitoring and Assessment of Spillage Reduction intended with estimation of benefits of projects in water use efficiency. • Reclamation's Southern California Area Office also spent approximately $1 million for water use efficiency activities. In federal FY 2005, they awarded approximately $10.5 million in Title XVI Program funding. • Standard Criteria for Evaluating Agricultural and Urban Water Management Plans will be completed in 2005. Reclamation's Mid-Pacific Region updated the Conservation and Efficiency Criteria (standard criteria) in FY 2005 and noticed it in the Federal Register with the comment period closing September 30, 2005. • Facilitated technical assistance to water suppliers and water users through the Water Conservation Field Services Program. • Provided technical assistance to growers throughout the state for the adoption of new irrigation equipment and improved water management techniques. In addition, local contracts with four Resource Conservation Districts were signed to provide technical assistance on irrigation water management to recipients of incentive payments for sprinkler and micro-irrigation systems.

Water Use Efficiency Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Technical Assistance (cont.):	Recycling Technical Assistance: • Continued to provide technical, biophysical and engineering-oriented knowledge on water recycling and desalination issues; conducted nine workshops and meetings with technical presentations; responded to policy makers, legislators and regulators on issues related to water recycling and desalination; responded to public questions and inquiries regarding water recycling and desalination permitting process; participated in the Southern California Water Recycling Project Initiative II; provided staffing and technical support to help implement the Recycled Water Task Force's recommendations; and participated in the Water Use Efficiency grant application reviews. Completed four research projects with local agencies and UCD to fill in knowledge gaps in optimizing energy needs in the treatment and use of recycled water; final reports are being prepared. Published DWR *Water Facts # 23* on water recycling. In collaboration with local water agency, published three technical papers on recycled water production and use. • Continued to provide technical knowledge on water recycling, including response to questions from policy makers, regulators, state and local agencies and the public on permitting issues; public health regulations and types, locations and amounts of water reuse occurring. Continued participation on Department of Health Services Recycled Water Committee. Water Desalination Technical Assistance: • Participated in the preparation and the implementation of the California Desalination Task Force pursuant to AB 2717; participated in the California Water Plan Update processes by providing technical support related to water recycling and desalination; helped increase public awareness on the importance of water recycling issues and projects; improved the Water Recycling and Desalination Website www.owue.water.ca.gov/recycle. DWR Water Desalination program provided technical assistance in developing the Water Desalination PSP.

Water Use Efficiency Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Technical Assistance (cont.):	Water Desalination Technical Assistance (cont.): • Reclamation's Southern California Area Office provided technical assistance to the Long Beach Water Department for the Seawater Desalination Pilot Plant. • Worked with the Interagency Task Force to establish criteria for Refuge Water Management Plans.
Oversight and Coordination: • Provide guidance to WUE implementing agencies in interpreting the ROD. • Employ methods of informal communications, such as staff-level meetings and conference calls with agency staff, for dissemination and exchange of information. • Engage in formal communications as necessary, such as reports to the California Bay-Delta Authority, the Bay-Delta Public Advisory Committee and the BDPAC WUE Sub-committee.	• Made progress in evaluating the future WUE costs and performance through development of the ROD-specified Year 4 WUE Evaluation Report released in August 2005. • Provided guidance to WUE agencies in interpreting the ROD and facilitated communications. Participated in the BDPAC WUE Sub-committee quarterly meetings. • Published Final Report of the Independent Review Panel on Appropriate Measurement of Agricultural Water Use in Year 4. Also prepared staff definition of Appropriate Urban Water Use Measurement. These actions completed a ROD commitment. • Have fully engaged in quarterly BDPAC WUE Sub-committee meetings since the Sub-committee was established by BDPAC in 2002.

Water Quality-progress and accomplishments

Implementing Agencies: State Department of Health Services, State Water Resources Control Board, U.S. Environmental Protection Agency, Regional Water Quality Control Boards

The Water Quality Program has awarded $76 million during its first five years. A total of $41 million was awarded to 54 successful applicants for competitive grants. The remaining $35 million was designated in legislation for three projects to treat or relocate agricultural discharges affecting the Contra Costa Water District (CCWD) and for a water exchange partnership between the San Joaquin Valley and the Metropolitan Water District (MWD) in Southern California.

There are 16 additional projects funded for $18.1 million that contribute to the Drinking Water Quality Program (DWQP) and are tracked as DWQP projects for purposes of meeting program commitments. These projects were funded by other CALFED Program elements (ERP, Watershed and Conveyance), as well as the Environmental Protection Agency (EPA). The majority of projects (40) and nearly half the funding were for source controls in the Delta. The second largest group of projects (14) was to control runoff in the California Aqueduct and similar conveyances.

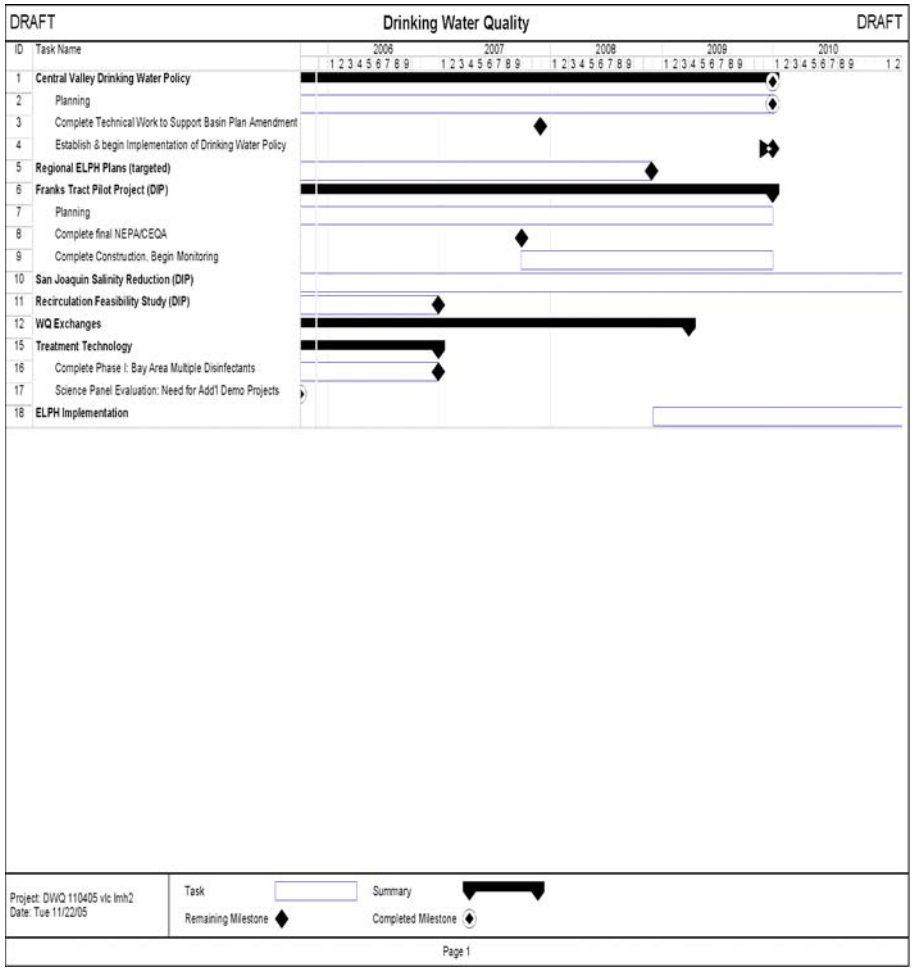
In Year 5, CALFED Program agencies:

- Adopted a resolution supporting the development of a drinking water policy for the Sacramento-San Joaquin Delta and upstream tributaries. This effort was funded by the California Urban Water Agencies, the Sacramento Regional County Sanitation District, the Sacramento Watershed Monitoring Program, the EPA and the CALFED Program. Drinking water policy technical studies have compiled a drinking water quality database and begun development of conceptual models;
- Approved a total maximum daily load or TMDL to control salt and boron discharges into the lower San Joaquin River. The TMDL will now go to the SWRCB and the EPA for approval as an amendment to the Water Quality Control Plan (Basin Plan);
- Identified regional planning as a high priority for the program. Pilot regional drinking water quality management plans were developed for Southern California, Northern Sacramento Valley, Delta and Bay Area Regions;
- Completed an initial program assessment;
- Completed construction of a permanent monitoring station on the San Joaquin River near Vernalis, purchased and installed real-time water quality monitoring equipment at key Delta and water project locations;
- Completed important studies of drinking water constituents of concern in the SWP system and application of advanced water treatment technologies; and
- Supported development of a San Joaquin River dissolved oxygen TMDL adopted by the SWRCB and a pilot aeration implementation project.

The goal of the Water Quality Program is good water quality for the millions of Californians who rely on the Sacramento-San Joaquin Delta for all or part of their drinking water.

Water Quality Program	
Key ROD Commitments	**Year 5 Accomplishments**
Address drainage problems in the San Joaquin Valley to improve downstream water quality	• The Central Valley Regional Water Quality Control Board (CVRWQCB) approved a TMDL to control salt and boron discharges into the lower San Joaquin River in 2004. The SWRCB approved the TMDL in November 2005. • Supported development of a San Joaquin River dissolved oxygen TMDL adopted by the SWRCB in November 2005 and a pilot aeration implementation project. • Completed construction of a permanent monitoring station on the San Joaquin River near Vernalis • Three projects that help implement drainage source control measures in the San Joaquin Valley concluded in Year 5.
Implement source controls in the Delta and its tributaries	In July 2004, the CVRWQCB adopted a resolution supporting the development of a drinking water policy for the Sacramento-San Joaquin Delta and upstream tributaries.
Support the efforts of the Delta Drinking Water Council or its successor	• Identified regional planning as a high priority and developed pilot regional drinking water quality management plans for Southern California, Northern Sacramento Valley, Delta and Bay Area regions. • Completed and published an initial assessment of progress. • Completed and published a survey on Delta drinking water treatment issues.
Study recirculation of export water to reduce salinity and improve dissolved oxygen in the San Joaquin River	Recirculation of export water was successfully tested in fall 2004.
Invest in Treatment Technology Demonstration	• Completed studies on drinking water constituents of concern in the SWP system and application of advanced water treatment technologies. • MWD completed studies integrating UV (ultraviolet) disinfection and other oxidants.
Control runoff in to the California Aqueduct and other similar conveyances	One watershed assessment was completed in 2004.
Address water quality problems at the North Bay Aqueduct	• Solano County Water Agency (SCWA) implemented BMPs to control non-point source pollution in vicinity of North Bay Aqueduct • SCWA completed studies on alternative disinfectants.

Water Quality Program, cont.	
Complementary Actions	**Year 5 Accomplishments**
Establish a Bay Area Blending/Exchange project.	The Bay Area Water Quality and Water Supply Reliability Program evaluated cooperative projects among Bay Area water districts to meet their water quality and reliability objectives through the feasibility phase. This work has now transitioned into a regional group that is developing a Bay Area Integrated Regional Water Management Plan.
Facilitate water quality exchanges and similar programs.	The Friant Water Users Authority and MWD continue to implement the Phase 2 Workplan for the Water Quality Exchange Partnership.
Develop and implement within two years a plan to meet all existing water quality standards and objectives for which the state and federal water projects have responsibility.	DWR is preparing a report describing how it operates the SWP to meet the requirements of D-1641. In tandem, Reclamation will complete a final Program to Meet Standards report in 2006.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1 Central Valley Drinking Water Policy
2 Planning
3 Complete Technical Work to Support Basin Plan Amendment
4 Establish & begin Implementation of Drinking Water Policy
5 Regional ELPH Plans (targeted)
6 Franks Tract Pilot Project (DIP)
7 Planning
8 Complete final NEPA/CEQA
9 Complete Construction, Begin Monitoring
10 San Joaquin Salinity Reduction (DIP)
11 Recirculation Feasibility Study (DIP)
12 WQ Exchanges
15 Treatment Technology
16 Complete Phase I: Bay Area Multiple Disinfectants
17 Science Panel Evaluation: Need for Add'l Demo Projects
18 ELPH Implementation
Project: DWQ 110405 vlc lmh2
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Task
Summary
Remaining Milestone
Completed Milestone
Page 1

Levee System Integrity-progress and accomplishments

Implementing Agencies: California Department of Water Resources, California Department of Fish and Game, U.S. Army Corps of Engineers

Hurricanes along the Gulf Coast and last year's levee failure at Jones Tract have accentuated the focus and concerns about the stability of Delta levees. DWR is entering the second year of its multi-year study to evaluate the potential risk of Delta levee failure due to sea level rise, land subsidence and earthquake. In the first year, Phase 1 of the Delta Risk Management Study was completed and results highlighted additional risk potential from the current configuration of levees.

In the first five years, CALFED Progam agencies:

- Increased protection for, as well as maintained, 600-700 miles of Delta levees;
- Improved stability on more than 45 levee miles;
- Reused 1.3 million cubic yards of dredged material for levee stability and habitat development; and
- Created more than 33 acres of riparian and wetland habitat along with 16,000 linear feet of shaded riverine aquatic habitat.

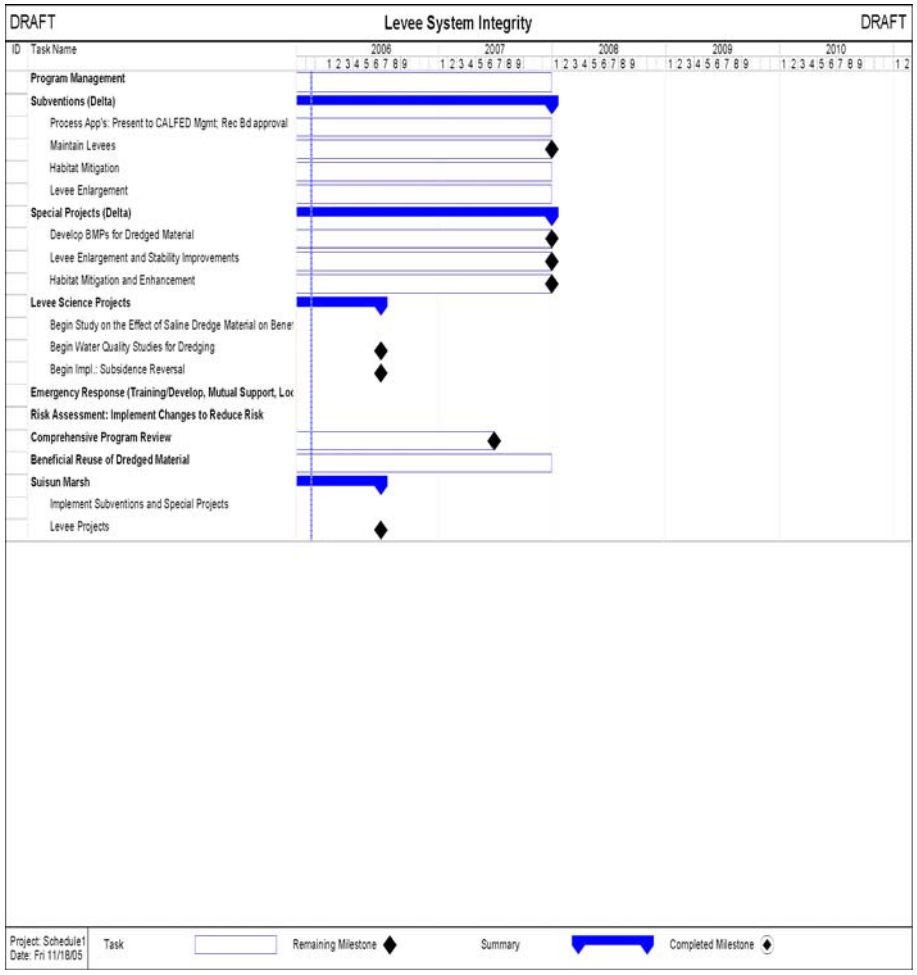
In Year 5, CALFED Program agencies:

- Continued working with the U.S. Geological Survey (USGS) on a subsidence demonstration project on Twitchell Island to determine relationships between biomass accumulation, sediment deposition and water management;
- Implemented emergency response activities for the flooding of Upper and Lower Jones Tract and participated in additional emer gency actions on Twitchell, Van Sickle and Bradford islands, and on Simmons-Wheeler Island in the Suisun Marsh;
- Reused approximately 100,000 cubic yards of dredged material for levee stability and habitat management; and
- Completed Phase I of the Seismic Risk Management Analysis. Phase II will be underway in late 2006.

The goal of the Levee System Integrity Program is to reduce risk to land use and associated economic activities, water supply, infrastructure and ecosystem from catastrophic breaching of Delta levees.

Levee System integrity Program	
Key ROD Commitments	**Year 5 Accomplishments**
Provide funding for local reclamation districts to reconstruct Delta levees to a base level of protection (PL 84-99).	Increased protection through maintenance and incremental improvement of more than 600 miles of Delta levees. Completed large-scale levee rehabilitation projects on Jersey, Bradford and Sherman islands. Initiated additional large-scale levee projects on Hotchkiss and New Hope tracts, and Bethel and Sherman islands.
Maintain and strengthen Delta levees, provide protection of life and personal property, habitats and drinking water quality.	Finalized the design for 1,000 linear feet of new inter-tidal habitat associated with a setback levee on Sherman Island. Partnered with the state Coastal Conservancy and Suisun Marsh Preservation Act agencies to develop an acquisition package for 660 acres at Mein's Landing in the northern Suisun Marsh for tidal wetland restoration. Purchased approximately 1,500 acres of historic dairy land along Dutch Slough for tidal restoration project. Initiated design and construction of habitat projects on Grizzly Slough.
Develop BMPs to control and reverse subsidence and for the beneficial reuse of dredged material.	Continued working with the USGS on a subsidence demonstration project on Twitchell Island to determine relationships between biomass accumulation, sediment deposition and water management. Worked with USGS and National Grant Services to conduct LiDar survey (aerial photography to aid in determination of subsidence rates, as well as inundation volumes) of entire Delta and Suisun Marsh. This is the first survey to encompass this land area in a single action. Reused approximately 100,000 cubic yards of dredged material for levee stability and habitat management. Developed a framework for long-term management strategy for reuse of dredged materials in the Delta.

Levee System integrity Program, cont.	
Key ROD Commitment	**Year 5 Accomplishments**
Enhance emergency management response capability of local, state and federal agencies.	Completed Phase I of the Seismic Risk Management Analysis. Results highlight additional risk potential from the current configuration of levees in the Delta. Phase II will be underway in 2006. Requested a $1 million federal grant under the Hazard Mitigation Grants Program to conduct magnetic anomaly surveys (identify weak spots and elevations) of all Delta islands. Implemented emergency response activities for the flooding of Upper and Lower Jones Tract. Participated in additional successful emergency actions which prevented flooding on Twitchell, Van Sickle and Bradford islands; and Grizzly West, Honker Bay and Simmons-Wheeler islands in the Suisun Marsh. Continued work with the state Office of Emergency Services and the six Delta counties to establish a Delta basin-wide asset management plan for emergency response. Prepared MOU with CDFFP to further enhance the emergency response capability within the Delta. Rehabilitated storage facilities for emergency response supplies on Twitchell Island.
Complementary Action	**Year 5 Accomplishments**
Sacramento and San Joaquin River Comprehensive Study.	Completed in 2004. Next steps, identification of specific projects to undergo feasibility study and then design and construction. This complementary action also appears in the Conveyance and Ecosystem Restoration Program Elements.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Program Management
Subventions (Delta)
Process App's: Present to CALFED Mgmt; Rec Bd approval
Maintain Levees
Habitat Mitigation
Levee Enlargement
Special Projects (Delta)
Develop BMPs for Dredged Material
Levee Enlargement and Stability Improvements
Habitat Mitigation and Enhancement
Levee Science Projects
Begin Study on the Effect of Saline Dredge Material on Bene
Begin Water Quality Studies for Dredging
Begin Impl.: Subsidence Reversal
Emergency Response (Training/Develop, Mutual Support, Loc
Risk Assessment: Implement Changes to Reduce Risk
Comprehensive Program Review
Beneficial Reuse of Dredged Material
Suisun Marsh
Implement Subventions and Special Projects
Levee Projects
Project: Schedule1
Date: Fri 11/18/05
Task
Remaining Milestone
Summary
Completed Milestone

Ecosystem Restoration Program-progress and accomplishments

Implementing Agencies: California Department of Fish and Game, U.S. Fish and Wildlife Service, National Marine Fisheries Service (NOAA Fisheries Service)

In the past eight years, the Ecosystem Restoration Program (ERP) has implemented ecosystem restoration projects and programs to improve aquatic and terrestrial habitats and natural processes to support fish and wildlife populations within the Bay-Delta and its tributary watersheds. The ERP is guided by the ERP Strategic Plan, which provides the conceptual framework and process that will guide the refinement, evaluation, prioritization, implementation, monitoring and revision of more than 600 programmatic actions within all regions of the Bay-Delta. The ERP has also been guided by the Multi-Species Conservation Strategy and biological opinions from the U.S. Fish and Wildlife Service and National Marine Fisheries Service (NOAA Fisheries Service), which identifies and evaluates species and habitats that could be affected by the CALFED Program, and conservation goals for those species and habitats. During this time, CALFED Program agencies:

- Awarded more than $540 million for 460 projects. To date, 261 projects or 57 percent have been completed, most from the pre-ROD years prior to 2000-01. Grant recipients reported approximately $285 million of matching funds, resulting in a combined total of approximately $825 million;
- Met or exceeded the schedule for nearly 80 percent of the 119 ecosystem milestones provided for in Stage 1. More than 40 per cent of ERP actions address priority Multi-Species Conservation Strategy species listed in the milestones; and
- Protected or restored about 100,000 acres of habitat. Some examples include:
  - CALFED Program-funded cooperative projects are contributing to the restoration and protection of 7,000 acres of wetlands in San Pablo Bay and Suisun Marsh, exceeding the Stage 1 target for tidal marsh restoration in San Pablo Bay.
  - More than 50,000 acres of seasonal wetlands in the Sacramento River Region are being enhanced, protected or restored.
  - Approximately 500 acres of fresh, emergent wetlands in the San Joaquin River Region are being enhanced, protected or restored.
  - Installed or improved 68 fish screens.
  - Sacramento splittail was removed from the federal list of threatened species.
  - Underwrote the protection of 54,000 acres of agricultural land, largely through easements. For example, more than 11,000 acres of wildlife-friendly agriculture was protected in the Delta, meeting the Stage 1 target for the region.

In Year 5, CALFED Program agencies:

- Funded seven projects, for a combined total of just over $15 million;
- Selected five projects that will monitor and evaluate previously funded ERP projects. The projects will be funded for a combined total of approximately $6.1 million;
- Considered eight additional projects to monitor and evaluate existing restoration actions, and four for baseline fish and water monitoring. The total award could reach approximately $9.3 million; and
- Refocused efforts planned for the next two years on high priority activities to address the decline of pelagic organisms in the Delta.

The goal of the Ecosystem Restoration Program is to improve the ecological health of the Bay-Delta watershed by restoring and protecting habitats, ecosystem functions and native species.

Ecosystem Restoration Program (ERP)	
Key ROD Commitment	**Year 5 Accomplishments**
Restore habitat in the Delta and its tributary watersheds	ERP awarded more than $540 million to 460 projects that address its six program goals; 261 projects (approximately 58 percent) are completed, mostly from the pre-ROD years. Approximately $285 million in matching funds results in a combined $825 million for ERP projects. An assessment in how well the progress toward achieving Stage 1 milestones determined that most of the 119 milestones were on or ahead of schedule; approximately 70 percent of ERP actions have a connection with the priority species listed in the milestones. ERP-funded projects and actions are credited with: • Contributing to the delisting by the U.S. Fish and Wildlife Service (USFWS) of the Sacramento splittail from threatened status under the USESA (2003) • Contributing to the return of the Least Bell's Viero songbird to the San Joaquin River region (2005) During Year 5, ERP completed key strategic planning activities: • The Delta Regional Ecosystem Restoration Implementation Plan was refocused to address pelagic organism decline issues. • Years 6 and 7 priorities were established and presented in the program's Multi-Year Program Plan • ERP, the CALFED Science Program and the USFWS hosted a three-day workshop to assist in developing a comprehensive monitoring program for Central Valley anadromous salmonid populations. • In September 2004, the Selection Panel made its recommendations regarding monitoring and evaluation grant awards. Four projects were selected for funding: Invasive Spartina control project by the California State Coastal Commission, an integrated regional wetland monitoring project by the Marin Audubon Society, Lower Clear Creek monitoring program by the Western Shasta Resource Conservation District and Tuolumne River restoration monitoring by Turlock Irrigation District. ecommended several fish monitoring projects be funded as directed actions. • In October 2005, the ERP released another project solicitation proposal for projects that assist farmers in integrating agricultural activities with ecosystem restoration. Project selection and funding will take place during Year 6.

Ecosystem Restoration Program (ERP), cont.	
Key ROD Commitment	**Year 5 Accomplishments**
	Also in Year 5, ERP funded seven new projects for a combined total of $15.2 million in grants: • Wilkins Slough Positive Barrier Fish Screen—Sediment Removal Project (Sacramento River Region) • Tisdale Positive Barrier Fish Screen Pumping Plants (Sacramento River Region) • Expanded Prevention, Detection, and Control of Purple Loosestrife in the Bay-Delta Watershed (Delta and Bay Regions) • Cosumnes River Preserve Perennial Pepperweed Control Project (Delta Region) • Arundo Eradication and Coordination—Phase II (multiple regions) • Hamilton City Flood Damage Reduction and Ecosystem Restoration Project—preconstruction engineering and design phase (Sacramento Region) • A pilot project for Monitoring, Stakeholder Involvement and Risk Communication Relating to Mercury in Fish in the Bay-Delta Watershed (Delta and Bay Regions) In addition, the following projects were completed during Year 5: • *Research, Outreach and Education on Fish Contamination in the Sacramento-San Joaquin Delta Watershed—Phase I Scoping* (01D-C19) [Sacramento Region, Delta Region]: This project funded needs assessment surveys for the Delta Fish Project, an interagency effort to reduce exposure to mercury in populations that consume fish caught in the Delta watershed. The needs assessment findings resulted in several recommendations that are being carried out in Phase II. These recommendations include methods of developing and disseminating information to Southeast Asian, Latino, African-American and Russian communities that regularly eat fish caught in the Delta, about the health risks associated with mercury contamination of the fish. One such method is to work with health care providers such as family practice physicians to inform the target populations, especially women of childbearing age, about risks. Results of this project directly impact the second phase, which addresses critical Environmental Justice commitments of the CALFED Program.

Ecosystem Restoration Program (ERP), cont.	
Key ROD Commitment	**Year 5 Accomplishments**
	• *Selenium Effects on Health and Reproduction of White Sturgeon in the Sacramento-San Joaquin Estuary* (02-P35) [Bay Region]: This study confirmed that selenium bioaccumulation by white sturgeon in embryos and newly-hatched larvae significantly increases mortality rates and larval defects (including edema and spinal deformities) at endogenous levels associated with developmental toxicity in other fish species. Further sturgeon population monitoring for tissue selenium burden will better reveal a pattern of selenium bioaccumulation and effect of selenium on reproduction via maternal selenium transfer to the offspring. Results of this study can benefit POD studies and the information has been given to the POD Studies team. • *Chronic Toxicity of Environmental Contaminants in Sacramento Splittail (Pogonichthys macrolepidotus): A Biomarker Approach* (99-N07) [Bay and Delta Regions]: Splittail is a sentinel species used to monitor degradation of natural habitats. This study combined ongoing splittail assessment efforts (by DFG and the Interagency Ecological Program) and field and laboratory integrated biomarker approach to establish a causative link between contaminant exposure and chronic deleterious health effects in splittail. Study results support the cause and effect link between selenium exposure and chronic toxicity in splittail; the study also establishes the effectiveness of integrating histopathologic biomarkers with chemical analyses and biological responses as an effective way to assess the effects of environmental contaminants on resident fish populations and the health of their ecosystems. Results of this study can benefit POD studies and the information has been given to the POD Studies team. • *Feasibility Study of the Ecosystem and Water Quality Benefits Associated with Restoration of Franks Tract, Big Break and Lower Sherman Lake* (01-C05) [Delta Region]: Studies to evaluate the potential to create ecosystem, water quality, recreational and other benefits at Franks Tract, Lower Sherman Lake and Big Break resulted in the Flooded Islands Pre-Feasibility Study Report published June 2005. Four alternatives are presented in the report, along with recommendations to further refine those alternatives and develop pilot programs. Results and recommendations from this report will be further developed, eventually leading to a project or projects that will improve water quality and meet ecosystem restoration objectives in the Delta. • *Battle Creek Conservation Easement Acquisition, Management and Restoration Planning* (01-N24) [Sacramento River Region]: This project purchased conservation easements on two key Battle Creek properties. The Eagle Canyon Ranch conservation easement cost-share acquisition protected 988 acres and about 2 miles of frontage along the North Fork of Battle Creek. The Miller (Burton) Ranch conservation easement acquisition protected 1,511 acres and about 3 miles of frontage on the main stem of Battle Creek; much of the frontage is on both sides of the creek. These acquisitions contribute to meeting ERP's habitat restoration goals in the area and therefore contributing to the recovery of key at-risk salmonid runs. • *Educating Farmers and Landowners in Biological Resource Management* (01-N42)

Ecosystem Restoration Program (ERP), cont.	
Key ROD Commitment	**Year 5 Accomplishments**
	[Sacramento River Region, San Joaquin River Region]: This project brought technical expertise to farmers and landowners to reduce agricultural inputs into waterways and to restore habitat; landowners in the Merced River watershed and Solano County received on-farm conservation plans to assist with conservation practices. More than 1,500 people participated in 35 educational events that addressed topics as diverse as invasive plant species, restoration practices for controlling erosion, minimum tillage practices and alternatives to chemical weed control. As a result of this education program, farmers and landowners are establishing agricultural practices that benefit wildlife, reducing farm-related water contamination, and instituting and sharing with farmers outside the project areas the ideas developed through this project. *Full-Scale Demonstration of Agricultural Drainage Water Recycling Process Using Membrane Technology* (02-P44) [San Joaquin River Region]: This pilot-scale demonstration project field tested a new agricultural drainage water desalination process. The demonstration project achieved a >90 percent desalinated water recovery rate; the project also removed boron to a limit desired by farmers. With the desalination and low boron rates, the project demonstrated that the new process could allow farms to become closed loop water systems, thereby reducing the amount of contaminated discharges released into larger water systems. Outcomes from this project can result in nearly200,000 acre-feet annually of "new water" supplies for California if larger scale demonstration projects produce similar results. Information from this project can help in meeting environmental water quality, water use efficiency goals and water supply reliability goals; the final report was shared with the Drinking Water Quality, Water Use Efficiency and Water Management programs. • *Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta* (02-P45) [Delta Region]: This project produced a series of interpretive GIS map layers showing the distribution of historical river landforms (including natural levees, floodplains, and stream channels) for floodplain and habitat restoration; likely locations of historic hydraulic mining-derived sediments stored along the river margins; and the likely composition of foundation materials underlying existing levees for evaluation of levee stability. These map layers provide necessary information for ecosystem restoration planning and levee engineering, which address two of the four program objectives for the CALFED Program. The GIS map layers are available to the Levee System Integrity Program.

ERP actions have resulted in record salmon runs and work is continuing on habitat restoration aimed at increasing abundance of other Delta fishes.

Ecosystem Restoration Program (ERP), cont.	
Key ROD Commitment	**Year 5 Accomplishments**
	• *Development of a Comprehensive Implementation Plan for a Statistically-Designed Marking/Tagging and Recovery Program for Central Valley Hatchery Produced Chinook Salmon and Steelhead* (99-N13/13b) [Sacramento River Region]: This project describes a comprehensive program to mark, tag and recover hatchery-reared salmon to estimate and monitor trends of adult Chinook salmon production from Central Valley hatcheries, as well as wild salmon populations. Accurate population data gathering and trend analysis will lead to better habitat restoration and water management decisions. The next phase of this project, carrying out the program, is a priority action for ERP in Year 6. • *Hamilton City Flood Damage Reduction and Ecosystem Restoration Feasibility Study, July 2004* (02-C05-D) [Sacramento River Region]: This feasibility study assesses the risk of flooding to Hamilton City from the Sacramento River and how the river's ecosystem has been degraded, describes the alternatives to increase the city's flood protection and restore the ecosystem, and recommends a plan to achieve the flood protection and restoration. For flood protection, the recommended plan includes constructing a setback levee of varying heights along 6.8 miles of the river. To meet the ecosystem restoration objective the plan is to remove most of the existing levee to reconnect the river with the floodplain.
Augment stream flow in upstream areas through voluntary water purchases of up to 100,000 acre-feet annually for native fish.	ERP implementing agency managers re-directed EWP funds toward other high priority projects ready for implementation and scaled back the focus of EWP to two of the priority streams: Clear Creek and the Tuolumne River. The program continues to develop a full proposal for flow acquisition on Clear Creek. The full proposal process is expected to be completed in Year 6 (18 months from now). The program continues to work toward flow augmentation on the Tuolumne River.
Improve fish passage through modification or removal of dams, improved bypasses, screens and ladders.	In Year 5, the 245 cfs city of Sacramento diversion on the Sacramento River screen construction was completed. UCD completed its fish treadmill tests. Two fish screen projects were funded: Wilkins Slough Positive Barrier Fish Screen—Sediment Removal, and Tisdale Positive Barrier Fish Screen Pumping Plant In addition, three other fish passage projects were scheduled to be completed during Year 5: • Sacramento River Small Fish Screen Project Vertical River Pump Diversions • Fish Passage Improvement Project at the Red Bluff Diversion Dam—Phase II • Selected Fish Screens on Sacramento River and Tributaries
Integrate flood management and ecosystem restoration.	CALFED Program ERP staff is participating in drafting the Suisun Marsh Plan, which will incorporate ecosystem restoration actions with levee system integrity actions. The writing group is drafting alternatives as part of a programmatic EIR/S. The anticipated publication of the draft programmatic report is early 2007.

Ecosystem Restoration Program (ERP), cont.	
ERP Complementary Actions	
Implement integrated flood management, ecosystem restoration and levee restoration under the Sacramento/San Joaquin River Basins Comprehensive Study being prepared by the ACE and California Reclamation Board. Significant elements of this comprehensive study, when implemented, will further the purposes of the ERP. CALFED Program agencies intend that final development and implementation of actions under the comprehensive study will be coordinated and consistent with the CALFED Program.	An interim report and technical documentation for the Sacramento-San Joaquin River Basins Comprehensive Study (Comp Study) are complete. CALFED Program funding was secured for the Hamilton City Flood Damage Reduction and Environmental Restoration Feasibility Study, an initial component of the Comp Study that was completed in July 2004. The next phase of the Hamilton City project is the pre-construction engineering and design (PED) phase; ERP is developing the agreement with DWR to secure funds to complete this phase of the project. ERP will continue working with the ACE as it develops the Comp Study to ensure that future Comp Study projects coordinate with the CALFED Program. Funds were provided for the California State Reclamation Board's Two-Dimensional Detailed Hydraulic Model for Determining Flood Conveyance Impacts of Ecosystem Restoration Projects study in the Yolo Bypass and for the Deer Creek Watershed Conservancy's Lower Deer Creek Restoration and Flood Management Feasibility Study and conceptual design. These reports may provide guidance for future Comp Study implementation projects that could be carried out consistent with achieving the ERP strategic goals and objectives.
In addition to the ERP actions funded through the CALFED Program, ongoing state and federal commitments to fish and wildlife restoration will continue and will supplement the achievement of the CALFED Program objectives and activities. These programs include CVPIA and Four Pumps Agreement, among others.	The ERP Implementing Agencies—California Department of Fish and Game, the U.S. Fish and Wildlife Service, and NOAA Fisheries Service—have a long-standing record of fish and wildlife restoration and are continuing of their own accord. These actions contribute significantly to meeting CALFED Program objectives and in many cases represent ongoing partnerships among the ERP Implementing Agencies. For example, under the Habitat Restoration Program of CVPIA Section 3406 (b)(1) "other", nine conservation actions were funded totaling more than $1.3 million, seven of which are new projects. These new projects range from planning floodplain restoration on a national wildlife refuge to establishing a working landscape project on a conservation easement. Two existing projects received funding to continue giant garter snake monitoring at the Colusa NWS and an adaptive vegetation management on serpentine soils study. Under the Four Pumps Agreement, examples of projects include annual construction of a removal fish passage barrier that protects fish on the San Joaquin River, continued funding for spring-run protection activities on the tributaries of the upper Sacramento River, and significant progress toward a water exchange on Deer Creek. Other examples of projects under the Four Pumps Agreement include actions on the Tuolumne River Mile 44 (Bobcat Flat), Lover's Leap on the Stanislaus River, and Merced Wing Dam construction. For more information about other fish and wildlife activities by these agencies, please see their websites at: California Department of Fish and Game-- http://www.dfg.ca.gov/ U.S. Fish and Wildlife Service-- http://www.fws.gov/sacramento NOAA Fisheries Service -- http://www.nmfs.noaa.gov/

DRAFT — Ecosystem Restoration — DRAFT

ID	Task Name
	At Risk Delta Dependent Species
	Battle Creek Habitat Restoration Project
	Coleman Intake Screens
	Coleman Barrier Weir and Fish Ladder Modifications
	Butte Creek Spring-Run Chinook Salmon Life History I
	Clear Creek restoration
	Clear Creek - headout only
	Clear Creek anadromous salmonid monitoring program
	Lower Clear Creek Monitoring Program
	Status and trends/baseline (salmonids)
	Constant Fractional Marking
	Compreh. Central Valley adult Chinook Salmon escape
	Upper Sac. River basin Chinook Salmon escapement
	Develop Central Valley Steelhead compreh. monitoring
	Sac River juv. winter Chinook Salmon estimates: Adult
	Juvenile Outmigrant Sampling
	Juv. anad. salmonid emigration@Glenn-Colusa ID fish
	Real time flow monitoring in the Sacramento River syst
	San Joaquin Basin-wide temperature model
	Tuolumne River Restoration Monitoring
	EWP (Environmental Water Program)
	M&T Ranch/Llano Seco Pumping and Fish Screen Prc
	R108 Fish Screen
	Rim Dam fish passage evaluation
	Lake Davis Pike Containment Project
	Lake Davis pike eradication planning and implementati
	Zebra Mussel Rapid Response
	Zebra Mussel Prevention
	Delta Pelagic Fishes
	Blacklock tidal marsh habitat rest proj
	Restor. Of Cullinan Ranch
	Calhoun Cut Restoration
	Pelagic fish species scientific investigations
	Monitoring responses of Delta smelt pop ... SF estuary
	DRERIP
	Aquatic monitoring (IEP +)

Project: Schedule1 Date: Mon 11/14/0 — Task — Remaining Milestone — Summary — Completed Milestone

***** This chart represents when anticipated funding is needed for the listed project; the project itself may last for several months or years longer than what is shown.

DRAFT — Ecosystem Restoration — DRAFT

ID	Task Name
37	Hamilton Airfield/Bel Mann Keys (BMK) Wetland Restc
38	Napa Salt Ponds restoration
39	Napa Salt Ponds monitoring
40	Tidal restoration of lands acquired through CALFED G
41	01-C04 'Suisun Marsh Property Acq and Habitat Rest
42	Tidal restoration of Mien's Landing in Suisun Marsh
43	Tidal restoration of Hill Slough parcel in Suisun Marsh
44	**Multiple Species**
45	Add'l milestones: at-risk species affected by Water Pro
46	Invasive Spartina control implementation in the SF est
47	McCormack-Williamson Tract
48	Rest. of E. delta floodplain habitats: Grizzly Slough/Co
49	Sac. River-Chico Landing Subreach habitat restoration
50	Sac. River riparian monitoring & assessment consolida
51	Sac. River conservation area forum base funding
52	Lower Yolo Bypass strategic planning & feasibility ass
53	Suisun Marsh Plan (SMP)
54	Wetland response to modified hydrology: salinity mgmt
55	Conduct Comprehensive Terrestrial Monitoring
56	Cosumnes-Yolo Terrest.-aquatic ecotone (COYOTE P
57	Petaluma Marsh: Monitor/Secondary test site: Integ Re
58	Arundo donaz eradicate/coordinate prog.: monitor/eval

Project: Schedule1 Date: Mon 11/14/0 — Task — Remaining Milestone — Summary — Completed Milestone

***** This chart represents when anticipated funding is needed for the listed project; the project itself may last for several months or years longer than what is shown.

Watershed Program-progress and accomplishments

Implementing Agencies: State Resources Agency, Water Resources Control Board, Department of Water Resources, Department of Fish and Game; U.S. Fish and Wildlife Service, Department of Agriculture-Natural Resources Conservation Service

During its first five years, CALFED Program agencies awarded three rounds of competitive grants. A total of 116 grants were funded for just under $50 million dollars. Fifty-three of the projects have been completed. Beginning in 2003 and continuing through 2007, this program element funded through the Department of Conservation (DOC), 48 statewide watershed coordinators for a total cost of $3 million per year. Progress noted by DOC includes $6.2 million of other grant and project funds that have been brought into the program by the coordinators. Finally, the program has developed watershed assessments covering approximately 10,000 square miles and watershed management plans covering approximately 15,600 square miles in various watersheds throughout CALFED Program regions.

In Year 5, CALFED Program agencies have, in cooperation with the California Department of Forestry and Fire Protection (CDFFP):

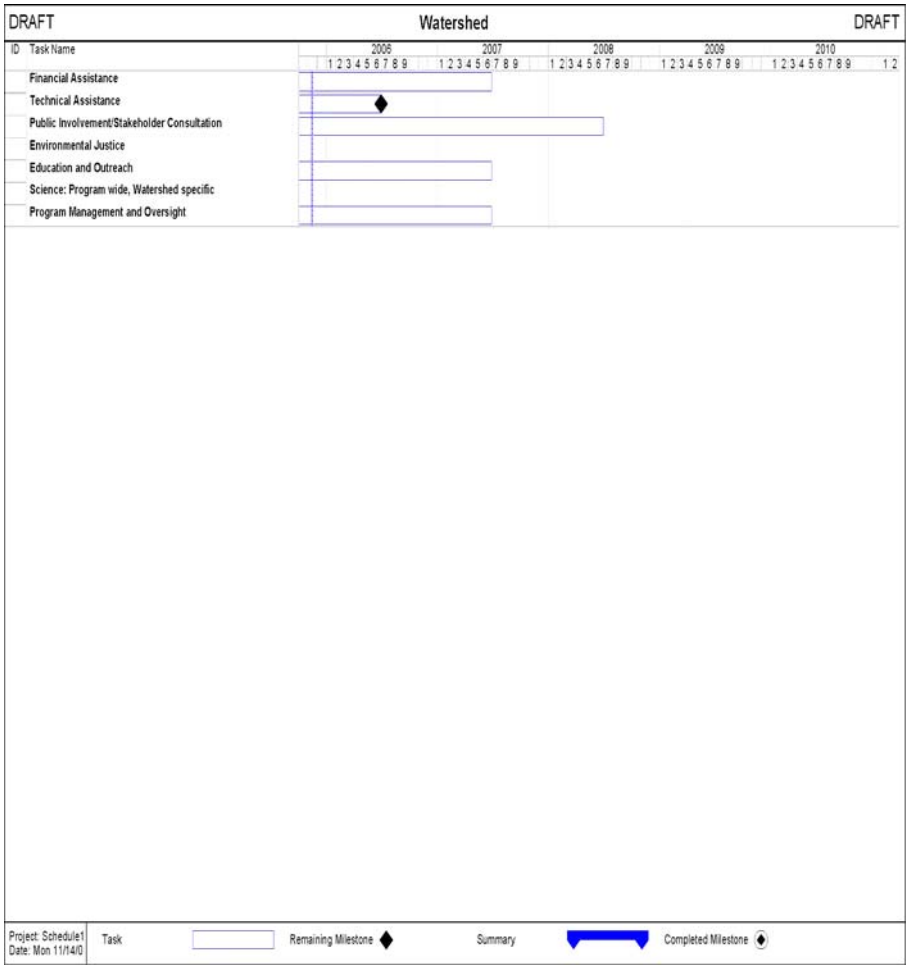
- Began efforts to spatially display Timber Harvesting Plans (THPs) for the northern portion of the CALFED Program Solution Area. CDF has spatially captured at least 10 years of THP history for most of the rest of the state;
- Provided support in the interpretation of Geographic Information System (GIS) data layers and on resources assessment issues to the Millerton Watershed Association, the Butte Creek Watershed Council and the American River Watershed Council;
- Completed the California Watershed Assessment Guide and the first eight of nine chapters of Volume I of the *California Watershed Assessment Manual*; and
- Completed, in conjunction with the U.S. Forest Service, the baseline vegetation data collection for 8-million acres of upland watershed lands in the CALFED Program Solution Area. This work establishes a baseline vegetation database in the Bay Area, South Sierra and Central Coast project areas.

The Watershed Management Program promotes locally-led activities and protections that contribute to CALFED Program goals for ecosystem restoration, water quality improvement and water supply reliability.

Year 5 Watershed Program Accomplishments	
ROD Commitment	**Year 5 Accomplishments**
Build local capacity to assess and effectively manage watersheds that affect the Bay-Delta system; develop watershed assessments and plans; implement specific watershed conservation, maintenance and restoration actions.	In its first five years, the Watershed Program awarded 116 grants for almost $50 million; A total of 53 of the projects were completed in Year 5 (please see the Year 5 Accomplishments column). Each of the 116 projects addressed two or more of the CALFED Program's objectives for water quality, ecosystem restoration and water supply reliability. The primary objectives of these projects include capacity building (15), assessment (18), watershed planning (27), education and outreach (12), implementation (31), monitoring (11) and research (2). Projects are in CALFED Program regions: • Sacramento Valley Region (58 projects) • Bay Region (21 projects) • Delta Region (10 projects) • San Joaquin Valley Region (16 projects) • Southern California Region (9 projects) • Statewide (2 projects) Beginning in 2003 and continuing through 2007, the Watershed Program funded 48 statewide watershed coordinators at an annual cost of $3 million; these coordinators were hired through the Department of Conservation (DOC). The coordinators have brought $6.2 million into the Watershed Program through other grant and project funds. The Watershed Program developed watershed assessments that cover approximately 10,000 square miles and watershed management plans that cover nearly 15,600 square miles in various watersheds throughout the CALFED Program Solution Area. During Year 5, the Watershed Program closed out 53 contracts for projects funded in 2000-01; the total expenditure was $17.3 million. These multiple objective contracts addressed two or more of the CALFED Program's objectives for water management, ecosystem restoration and water quality. The primary project types include: • Capacity building (11 projects) • Assessment (8 projects) • Watershed planning (15 projects) • Education and outreach (6 projects) • Implementation (8 projects) • Monitoring (4 projects) • Research (1 project)

Year 5 Watershed Program Accomplishments, cont.	
ROD Commitment	**Year 5 Accomplishments**
Build local capacity to assess and effectively manage watersheds that affect the Bay-Delta system; develop watershed assessments and plans; implement specific watershed conservation, maintenance and restoration actions.	Examples of projects implemented by the Watershed Program include: • A maintenance program by the Cache Creek Conservancy to manage for *Tamarix* and *Arundo donax* on Cache Creek. This project removed and controlled the invasive nonnative species *Tamarix* and *Arundo donax*, which displaced native flora and caused channel instability and offered little value to fish and wildlife in the watershed. The infestation of these species was reducing channel capacity and presented other detriments to Cache Creek. • A baseline water quality monitoring program in Calaveras County. The Watershed Program provided the Calaveras County Water District with a grant to conduct water quality and water volume monitoring in the Calaveras River. This monitoring provides important information that will aid in long-term goals of maintaining and restoring ecological processes related to fish, plant and wildlife resources as well as water quality in the watershed. • A conservation project in the Arroyo Seco Watershed, North East Trees. Under this project, a long-term watershed implementation plan was developed for the Arroyo Seco watershed, a major tributary to the Los Angeles River. This heavily-urbanized watershed in the Los Angeles area imports large amounts of water from the Bay-Delta system. Under this project, a watershed resources plan was developed to educate citizens about water conservation and better management of groundwater resources. Conserving local water resources make the watershed less dependant on water imported from the Bay-Delta; increasing urban water conservation leaves more water in the system for other beneficial uses. • A restoration project, with Ducks Unlimited at the Sutter National Wildlife Refuge, for a water conveyance restoration project. This project implemented actions resulting in increased capacity to convey water at the refuge. This includes improvements to better maintain and manage the permanent and seasonal wetlands and for reliable flows to support bird and fish populations. The project helped reduce sedimentation and erosion at the refuge, thereby improving the water quality.

Year 5 Watershed Program Accomplishments, cont.	
ROD Commitment	**Year 5 Accomplishments**
Build local capacity to assess and effectively manage watersheds that affect the Bay-Delta system; develop watershed assessments and plans; implement specific watershed conservation, maintenance and restoration actions.	The Watershed Program funded 34 projects implemented by SWRCB. The combined total for these projects is $24.3 million; funding sources for the grants were Propositions 13 and 50. All the projects address two or more of the CALFED Program's objectives of water quality, ecosystem restoration and water management. One project is statewide, 15 are in the Sacramento Valley Region, four in the Bay Region, four in the Delta Region, seven in the San Joaquin Region and three in Southern California. Also in Year 5, the Watershed Program coordinated with the California Department of Forestry for the following accomplishments: • Began efforts to spatially display Timber Harvesting Plans (THPs) for the northern portion of the CALFED Program Solution Area. At least 10 years of THP history has been captured for most of the remaining parts of the state. • Provided support for GIS data layer interpretation and for resources assessment issues to the Millerton Watershed Association, and the Butte Creek and American River Watershed councils • Completed the California Watershed Assessment Guide and eight of nine chapters of Volume 1 of the *California Watershed Assessment Manual* • Completed, in conjunction with the U.S. Forest Service, the baseline vegetation data collection for 8 million acres of upland watershed land in the CALFED Program Solution Area. This work establishes a baseline vegetation database in the Bay Area, South Sierra and Central Coast project areas. The following projects were scheduled for completion during Year 5: • Last Chance Creek Watershed Restoration Projects—Ferris Meadowview Reach • Lassen National Forest Watershed Stewardship within the Anadromous Watersheds of Butte, Deer and Mill Creeks • Adopt-A-Watershed Leadership Institute



Science Program-progress and accomplishments

Implementing Agencies: California Bay-Delta Authority, state and federal members of the Interagency Ecological Program

In its first five years, the Science Program has been involved in an intensive effort to improve understanding of the Bay-Delta system, as well as improve the application of science throughout the CALFED Program. Outcomes to date include:

- Appointed an Independent Science Board;
- Established an EWA Science Panel;
- Funded 19 directed research projects totaling approximately $10 million;
- Funded and convened 30 workshops dealing with CALFED Program priority issues;
- Sponsored three biennial science conferences;
- Produced 46 reports and white papers on a wide range of topics with emphasis on water operations and species of interests;
- Publish the journal *San Francisco Estuary and Watershed Science*; and
- Published *Science-in-Action* to bring important scientific information and understanding to the general public.

In Year 5, the Science Program:

- Funded over $12 million in projects through its first Proposal Solicitation Package (PSP);
- Organized the 3rd Biennial CALFED Science Conference and produced a summary report highlighting key scientific information and management implications;
- Published two volumes of new scientific findings relevant the Bay-Delta in the journal *San Francisco Estuary and Watershed Science*;
- Co-sponsored the 7th Biennial State of the San Francisco Estuary Conference;
- Organized two issue-specific workshops and two review efforts, including an extensive, three-workshop review of the San Joaquin River representation in the CALSIM II model; and
- Established seven new state-funded positions to support program function.

The Science Program focuses on large-scale issues that cut across multiple program objectives and regions and address critical resource management questions facing the CALFED Program.

Science Program	
Key ROD Commitments	**Year 5 Accomplishments**
Establish a body of knowledge directly relevant to CALFED Program actions and their implications that is unbiased, relevant, authoritative and integrated across program elements and communicated to the scientific community, CALFED Program agency managers, stakeholders and the public.	• Funded over $12 million in projects through its first PSP. • Awarded $4.1 million to eight CALFED Program Science Fellows to support a three-year formal post-doctoral research program to bring together academic scientists, agency scientists and senior research mentors in collaborative data analysis and research projects relevant to Science Program objectives. The fellows program formally approved by the Authority in 2004, will continue through 2011 with three more annual solicitations. • Sponsored and organized the 3rd Biennial CALFED Science Conference and produced a summary report highlighting key scientific information and management implications. • Co-sponsored the 7th Biennial State of the Estuary Conference • Published two issues of new scientific findings relevant the Bay-Delta estuary in the online journal, *San Francisco Estuary and Watershed Science.* • Published two issues of *Science-in-Action* covering two important topics in the Bay-Delta: mercury contamination and managing grasslands. • Established seven new state-funded positions to support program function
Appoint an independent science board for the CALFED Program as a whole by the middle of 2001.	The 18-member Independent Science Board (ISB), approved by CBDA in 2003, convened six public meetings in Year 5. The ISB gave regular testimonies and presentations at CBDA Board public meetings and produced three major products: the Levee Sub-committee Final Report, Recommendations on the Delta Improvements Package and the 2005 ISB Workplan.
Appoint an independent science panel for the EWA by the middle of 2001.	The Environmental Water Account Technical Review Panel has conducted annual technical reviews of the EWA program since 2001. In 2004, the panel conducted a cumulative technical review that focused on Year 5 actions, as well as cumulative actions of the first four years of the EWA Program.

Science Program, cont.	
Key ROD Commitments	**Year 5 Accomplishments**
Establish performance measures and indicators and a consistent strategy of ongoing development of these for each of the program areas.	• Made revisions to the Draft Framework for Performance Indicators for Science, Management and Adaptive Management in the CALFED Bay-Delta Program. • Presented a draft framework to Drinking Water Quality Sub-committee. • Developed a plan to work with CALFED Program elements and get scientific review for a draft framework.
Refine the set of ecological, operational and other predictive models that will be used in the evaluative process by the end of 2001.	The Science Program organized two issue-specific workshops and two review efforts, including an extensive, three-workshop review of the San Joaquin River representation in the CALSIM II model.
Develop an annual science report, format and content by 2001.	The Science Program has not developed an annual science report. In lieu of this, the Science Program has reported program progress and accomplishments in the CBDA Annual Report. In addition, the Science Program produces and disseminates a variety of science-based information directed to different audiences. These information sources include the Science Program web site and e-newsletter, *Science-in-Action*; the journal *San Francisco Estuary and Watershed Science*; *Management Cues*; and biennial Science Conference summaries, among others. A communications strategy was completed in 2005 that identifies Science Program accomplishments-to-date, existing approaches and products, and a plan to address existing and emerging needs for effectively communicating science.

DRAFT — Science — DRAFT

ID	Task Name
1	**Priority Information Needs**
2	PSP Grants
3	Directed Research Grants
4	CALFED Science Fellows
5	**Communication**
6	SFEWS Journal
7	CALFED Science Conference
11	State of Eustuary Conference
15	Science Program Website
16	Issue Workshops
17	Science Consortium
18	**Performance Evaluation**
19	Technical Review Panels
20	OCAP BO Review
21	IEP Workplan Review
22	EWA Review Workshop
23	CALSIM II San Joaquin Review
24	**Development of Performance Measures**
25	Develop Framework
26	Technical Review of Framework
27	Web-based Indicator Pkg (1st Iteration)
28	Annual Review of Indicators
32	Application of Scientific Practices
33	ISB
34	Peer Review Assistance
35	Program Planning and Reporting
36	Program Planning and Reporting Multi-year plan
43	Annual Report
56	IEP Coordination

2006 2007 2008 2009 2010

Project: Science 110405 vlc
Date: Tue 11/22/05

Task — Summary
Remaining Milestone — Completed Task

Page 1

Oversight & Coordination-progress and accomplishments

Implementing Agency: California Bay-Delta Authority

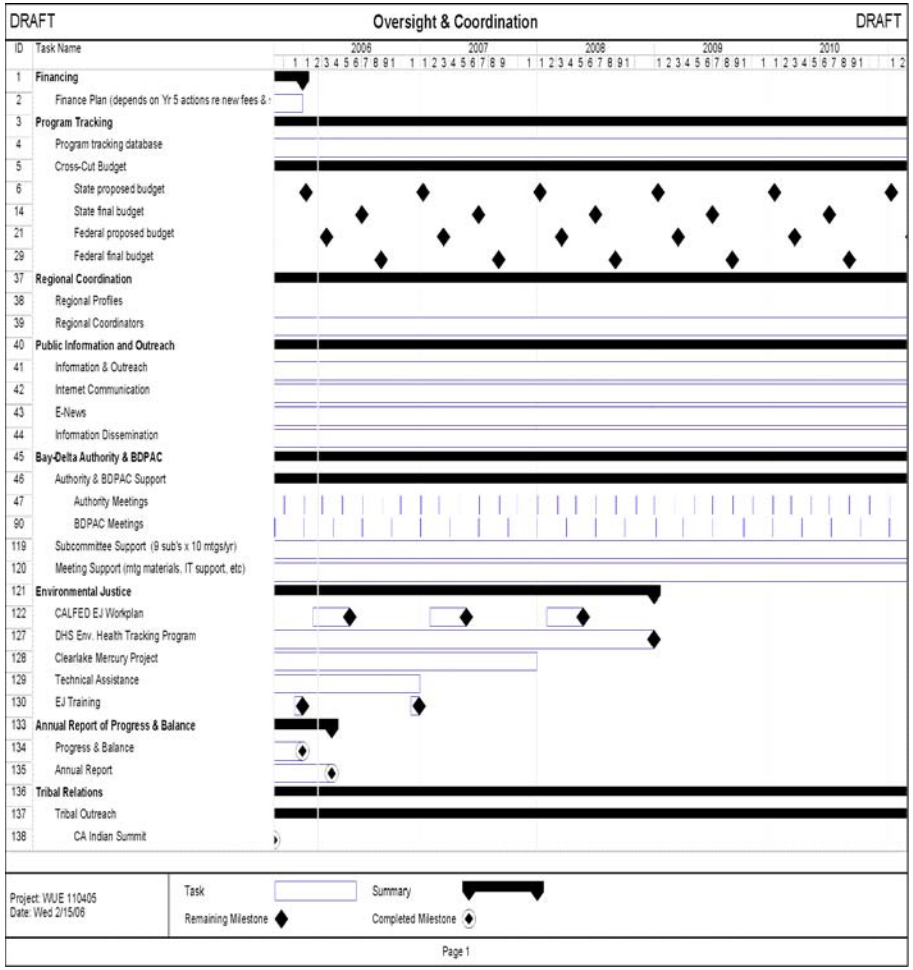
CBDA staff were extensively involved in efforts to address actions called for in the Governor's May 2005 budget revision. These efforts were reported early in this report.

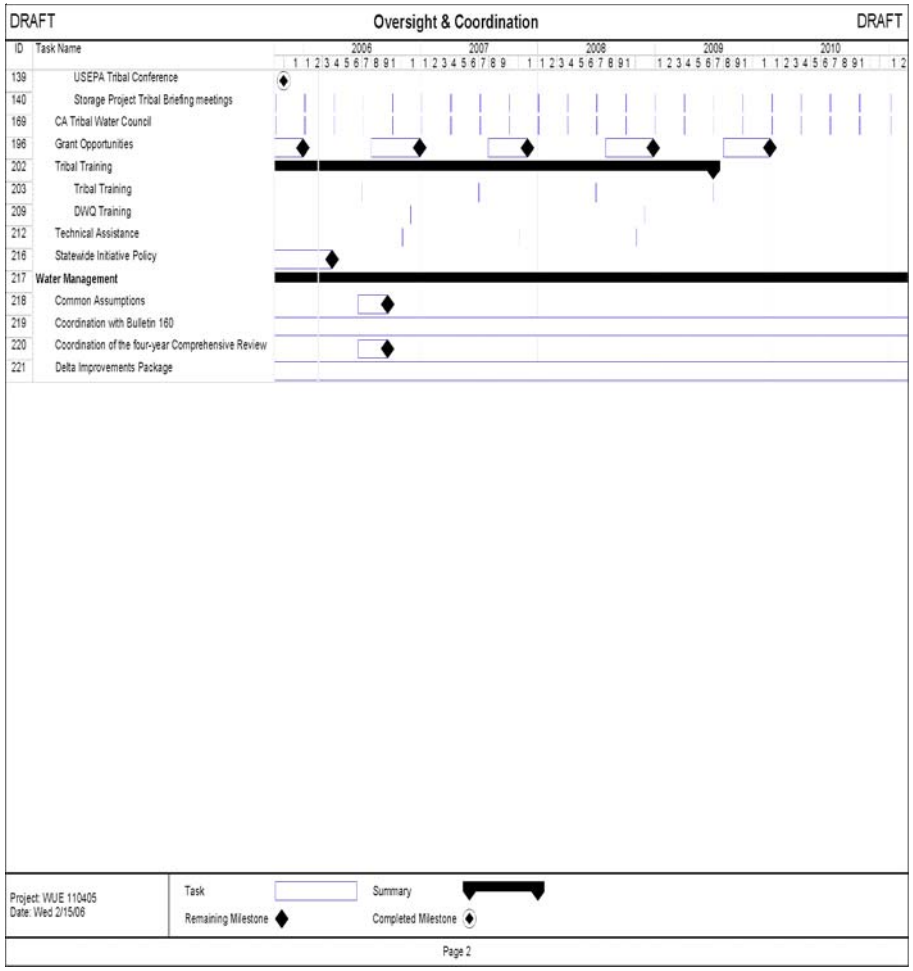
In addition, CBDA:

- Provided an important public forum for discussions surrounding the CALFED Program revitalization efforts, Delta water projects, science activities, program plans and progress, and agency grant awards;
- Continued support for the Bay-Delta Public Advisory Committee;
- Coordinated implementation of Environmental Justice and Tribal activities across all Program elements and agencies;
- Provided oversight for the preparation of CALFED Program plans prepared by implementing agencies; and
- Promoted the development and implementation of regional programs.

Oversight and Coordination	
Key ROD Commitment	**Year 5 Accomplishments**
Annual Report	The 2004 Annual Report was completed March 2005.
Environmental Justice	• Established the first Environmental Justice (EJ) special session at the 2004 Biennial CALFED Science Conference. • The EJ Sub-committee drafted program-wide objectives and specified program-by-program recommendations. • Worked with the Watershed Program and CDFFP to produce GIS data sets and eventual mapping of key CALFED Program project areas in EJ and tribal communities. • Worked with ERP grantee, San Francisco Estuary Institute, on the Mercury Fish Project Steering Committee, which is examining mercury contamination in Bay and Delta fishes and improving public awareness, outreach and education to affected communities.
Tribal	• Conducted tribal briefings and tours in coordination with Reclamation and DWR, including: meeting with the Winnemem Wintu Tribe in July 2004 to discuss various tribal issues. • Negotiating between Reclamation and the Winnemem Wintu Tribe to obtain a permit to hold a ceremonial war dance. A 12-minute video of the dance was shown at venues in the Bay Area and Sacramento.
Multi-year Program Plans	The CBDA Board approved the multi-year program plans for Years 5-8 in August 2004.
Annual Report on Progress and Balance	The Authority approved the Statement of Progress and Accomplishments for the 2004 Annual Report to the Legislature and Congress in October 2004.
Program Tracking	In January 2005, Authority staff compiled a comprehensive state/federal cross-cut budget report that was included in the Governor's budget for informational purposes.

CBDA provides an important public forum for discussions surrounding the CALFED Program revitalization efforts, Delta waterprojects, science activities, program plans and progress, and agency grant awards.





Bay-Delta Public Advisory Committee and California Bay-Delta Authority Activities in 2005

The California Bay-Delta Public Advisory Committee (BDPAC) is a cornerstone of the CALFED Program's public involvement. Established in October 2001, the 30-member BDPAC is chartered under the Federal Advisory Committee Act (FACA) to provide advice and recommendations about implementation of the CALFED Program.

BDPAC members advise the Secretary of the Interior. In addition BDPAC's advice and recommendations may be forwarded to or shared contemporaneously with Governor Schwarzenegger, members of the Authority and other State and Federal entities participating in the CALFED Program.

With representation from an array of environmental, water, tribal and civic interest groups, the BDPAC provides a key link among CALFED Program agencies, stakeholders and the public.

The California Bay-Delta Authority (Authority) oversees the implementation of the CALFED Program for the 25 state and federal agencies working cooperatively to improve the quality and reliability of California's water supplies while restoring the Bay-Delta ecosystem.

The California Bay-Delta Act of 2003 established the Authority and charged it with providing accountability, ensuring balanced implementation, tracking and assessing Program progress, using sound science, assuring public involvement and outreach, and coordinating and integrating related government programs.

During 2005, BDPAC members met with the public, implementing agencies and CBDA staff, on seven occasions, to discuss and provide advice on a number of issues. Similarly, the Authority convened 11 sessions to discuss and take action on a wide variety of items. The following table provides a general overview of the types of issues that were brought before both groups for advice and action.

Issues and Activities Brought Before the Bay-Delta Public Advisory Committee and the California Bay-Delta Authority

- Implementation grants for the Ecosystem Restoration, Science and Water Quality Programs
- CALFED Program Finance Plan
- CALFED Program's annual Statement of Progress and Accomplishments
- Nominations of members to the Independent Science Board
- Hamilton City Flood Damage Reduction and Ecosystem Restoration Project
- Divestiture of Prospect Island
- Battle Creek Salmon and Steelhead Restoration Project
- CALFED Program's annual program plans
- Criteria for approving annual program plans
- Department of Water Resources' Water Desalination Grants
- State Water Resource Control Boards' Agricultural Water Quality Grants and Water Recycling Grants
- Delta Improvements Package Implementation Plan
- Funding to support the Interagency Ecological Program's ongoing Delta hydrodynamic and fish studies
- CALFED Program refocusing and independent review
- Revitalizing the CALFED Program – The 10-Year Action Plan
- Tribal issues raised by the Winnemen Wintu realted Shasta Enlargement
- Delta Risk Management Strategy
- Payment in-lieu of taxes program
- Proposed Directed Action Proposal Solicitation and Evaluation Guidelines for the Ecosystem Restoration Program – Proposition 50 funds

California Bay-Delta Authority Members

State Members

Michael Chrisman, *Resources Agency*
Alan Lloyd, *Environmental Protection Agency*
A.G. Kawamura, *Department of Food and Agriculture*
Lester Snow, *Department of Water Resources*
Ryan Broddrick, *Department of Fish and Game*
Sandra Shewry, *Department of Health Services*

Federal Members

Gale Norton, *Department of the Interior*
Wayne Nastri, *Environmental Protection Agency*
Colonel Ronald Light, *Army Corps of Engineers*
Rodney McInnis, *National Marine Fisheries Service (NOAA Fisheries Service)*
Steve Thompson, *Fish and Wildlife Service*
Kirk Rodgers, *Bureau of Reclamation*

Public Members

Alfred Montna, *Sacramento Valley*
Susan Kennedy, *San Francisco Bay*
Patrick Johnston, *Sacramento-San Joaquin River Delta*
Bill Jones, *San Joaquin Valley*
Paula Daniels, *Southern California*
Marc Holmes, *Senate Appointee*
Daniel Wheeler, *Assembly Appointee*

Public Advisory Committee Member

Gary Hunt, Chair, *Bay-Delta Public Advisory Committee*

Ex-Officio Members

Senator Sheila Kuehl
Chair, Senate Natural Resources and Water Committee
Senator Bob Margett
Vice-chair, Senate Natural Resources and Water Committee
Assembly Member Lois Wolk
Chair, Assembly Water, Parks and Wildlife Committee
Assembly Member Michael Villines
Vice-chair, Assembly Water, Parks and Wildlife Committee

Bay-Delta Public Advisory Committee Members and Sub-committees

Members

Patricia Acosta, *Water Replenishment District of Southern California*
Gary Bobker, *The Bay Institute*
Denny Bungarz, *Glenn County*
Christopher Cabaldon, *City of West Sacramento*
Tom Clark, *Kern County Water Agency*
Marci Coglianese, *City of Rio Vista*
Martha Davis, *Inland Empire Utilities Agency*
Gregory Gartrell, *Contra Costa Water District*
David Guy, *Northern California Water Association*
Steve Hall, *Association of California Water Agencies*
Gary Hunt, Chair, *California Strategies LLC*
Ronald Jacobsma, *Friant Water Authority*
Steve Johnson, *The Nature Conservancy, California Chapter*
Lillian Kawasaki, *Los Angeles Dept. of Water and Power*
Leslie Lohse, *Paskenta Band of Nomlaki Indians*
Steve Macaulay, *California Urban Water Agencies*
Don Marciochi, *Grassland Water District*
Robert Meacher, *Plumas County*
Jerry Meral, *Planning and Conservation League Foundation*
Barry Nelson, *Natural Resources Defense Council*
Dan Nelson, *San Luis and Delta-Mendota Water Authority*
Bill Pauli, *California Farm Bureau Federation*
Timothy Quinn, *Metropolitan Water District of Southern California*
Rudolph Rosen, *Western Regional Office, Ducks Unlimited*
Michael Schaver, *Big Valley Rancheria*
Frances Spivy-Weber, *Mono Lake Committee*
Maureen Stapleton, *San Diego County Water Authority*
O.L. Van Tenney, *Glenn-Colusa Irrigation District*
Walter Wadlow, *Santa Clara Valley Water District*
Thomas Zuckerman, *Central Delta Water Agency*

Sub-committees

Delta Levees & Habitat
Drinking Water
Ecosystem Restoration
Environmental Justice
Steering Committee
Watershed
Water Supply
Water Use Efficiency
Working Landscapes

Legislative Actions

AB 466 (Matthews) CBDA Contracting Authority (Chapter 567).
This bill authorizes CBDA, in collaboration with DFG, to contract with independent scientists to investigate fishery resources in the Sacramento-San Joaquin Delta without regard to Department of General Services contracting requirements. In 2005, DFG reported a substantial decline in certain Delta fish species (Delta smelt, striped bass, threadfin shad) and the food web that sustains them. The urgency of the current investigation necessitates the immediate engagement of the few scientists who have the expertise to assess the causes of the current fishery decline. With this bill, CBDA can establish these science panels in a timely manner by writing noncompetitive bid contracts. In light of the serious decline in Delta fish populations, time is of the essence and the Legislature expects CBDA and the other cooperating agencies to address this issue without any delay.

AB 1200 (Laird) Sacramento-San Joaquin Delta (Chapter 573)
This bill requires DWR to evaluate the potential impacts on water supplies derived from the Sacramento-San Joaquin Delta resulting from subsidence, earthquakes, floods, changes in precipitation, temperature and ocean levels, and a combination of those impacts. The bill requires DWR and DFG to identify, evaluate and comparatively rate the principal options available to implement certain specified objectives that relate to the Delta and the Sacramento and San Joaquin river systems. The bill requires the departments to jointly report to the Legislature and the Governor the results of their evaluations and comparative ratings, as specified, no later than January 1, 2008.

SB 264 (Machado) Delta Flood Protection Fund (Chapter 583).
This bill extends the existence of the Delta Flood Protection Fund until July 1, 2008. Extending the fund will make approximately $1 million in revenue remaining in the account available for use in the local subventions program or for special projects. DWR administers the subventions program cooperatively with levee maintenance agencies to preserve the many assets of statewide interest located in the Delta. Local agencies engaged in levee maintenance and improvements are eligible to cost share the expense of their work through the subventions program. After July 1, 2006, the subventions program will be authorized to make local assistance grants of not more than 50 percent of eligible costs (a reduction of 25 percent) and the total of all grants would be limited to $2 million annually (a reduction of approximately $4 million annually).

Governor's May Revision of 2005-06 Budget
The Governor's May Revision of the 2005-06 Budget called for a three-point plan to "allow the CALFED Program to move forward and focus on addressing the highest priority issues associated with conflicts in the Delta." The three points – Independent Review, Refocusing Program Priorities and Financing – were conducted concurrently and coordinated through CBDA. Outcomes of two of the activities (Refocusing Program Priorities and Financing) will be combined into a 10-Year Action Plan, also called for in the May 2005 Revision.

Finance Plan

The following Year 5 funding table contains fiscal information provided by state and federal CALFED Program agencies. Year 5 represents Fiscal Year 2004-05 for the state agencies, and Fiscal Year 2005 for the federal agencies. Funding included is only for those programs that are directly contributing to the CALFED Program objectives, and commonly referred to as Category A programs or projects. The local cost share funding information is also provided by the state and federal agencies and reflects an estimate of expected local cost shares associated with grant funds.

Year 5 Funding
2004-2005

CALFED Bay-Delta Program
Year 5 Funding
($ in millions)

Program Element	Total Year 5	FY 2004-05 State Funding [1]						FY 2005 Federal Funding [2]			Water User/Local Funding [3]			
		General Fund	Prop 204	Prop 13	Prop 50	Other State Funds[4]	State Subtotal	USBR	Other Federal[5]	Federal Subtotal	SWP	CVPIA RF	Local Grant Matching	User/ Local Subtotal
Ecosystem Restoration	$71.3	$0.8	$12.3	$10.0	$10.8		$33.9	$5.6	$1.6	$7.1	$2.1	$28.1		$30.2
Environmental Water Account	$33.7				$32.5		$32.5	$1.0	$0.2	$1.2				
Water Use Efficiency	$223.0	$1.2		$22.1	$1.7	$1.7	$26.7	$14.6		$14.6			$181.7	$181.7
Recycling	$216.6			*$22.1*	*$0.9*		*$23.0*	*$11.9*		*$11.9*			*$181.7*	*$181.7*
Desalination	$0.2				*$0.2*		*$0.2*	*$0.0*		*$0.0*				
Conservation	$6.2	*$1.2*			*$0.7*	*$1.7*	*$3.5*	*$2.7*		*$2.7*				*$0.0*
Water Transfers	$0.5	$0.3				$0.1	$0.5							
Watershed	$25.9	$0.1		$0.1	$25.7		$25.9							$0.0
Drinking Water Quality	$10.5	$0.2		$9.6	$0.7		$10.5							
Levees	$24.6				$21.2		$21.2			$0.0	$0.4		$3.0	$3.4
Storage	$354.6	$0.1		$77.3	$11.5		$89.0	$4.6		$4.6	$0.0		$261.0	$261.0
Surface Storage	$8.9				*$4.8*		*$4.8*	*$4.1*		*$4.1*	*$0.0*			*$0.0*
Groundwater Storage & Other	$345.7	*$0.1*		*$77.3*	*$6.7*		*$84.2*	*$0.5*		*$0.5*			*$261.0*	*$261.0*
Conveyance	$23.8	$1.0		$1.5	$0.0		$2.5	$3.5		$3.5	$17.8			$17.8
Science	$16.7			$2.0	$1.6	$0.1	$3.7	$3.7	$1.7	$5.5	$7.3		$0.2	$7.5
Science	$4.3			*$2.0*	*$1.3*		*$3.3*		*$0.8*	*$0.8*			$0.2	*$0.2*
Interagency Ecological Program	$12.4				*$0.3*	*$0.1*	*$0.4*	*$3.7*	*$1.0*	*$4.7*	*$7.3*			*$7.3*
Water Supply Reliability	$1.9				$1.9		$1.9							
Oversight & Coordination	$8.8	$7.7				$0.1	$7.8	$0.6	$0.3	$1.0				
Grand Total	**$795.3**	**$11.5**	**$12.3**	**$122.7**	**$107.7**	**$2.0**	**$256.2**	**$33.8**	**$3.8**	**$37.5**	**$27.6**	**$28.1**	**$445.9**	**$501.6**

[1] State funding includes funding from the California Bay-Delta Authority, Department of Water Resources, Department of Fish and Game, State Water Resources Control Board, Department of Forestry and Fire Protection, Department of Conservation, and the San Francisco Bay Conservation and Development Commission.

[2] Federal funding sources include U.S. Bureau of Reclamation Water and Related Resources funding for the CALFED Program (California Bay-Delta Restoration), U.S. Bureau of Reclamation Water and Related Resources (USBR W&RR), and appropriations from the U.S. Army Corps of Engineers, U.S. Fish & Wildlife Service, U.S. Geological Survey, and the National Marine Fisheries Service.

[3] Water User/Local funding includes State Water Project Funds and CVPIA Restoration Funds that are collected from state water contractors and Central Valley Project water users, but are budgeted and appropriated through the federal and state governments. Local grant matching funds are for the federal Title XVI water recycling program. All other local cost sharing amounts are estimated and updated as information becomes available.

[4] Includes DWR funds that contribute to the Water Conservation Program, SWRCB Water Rights funds that support the Water Transfers Program, Interagency Ecological Program (IEP) funds from various departments that contribute to the Science Program, and Department of Conservation funds for oversight and coordination activities.

[5] Other federal funding typically includes ERP, EWA, and Oversight & Coordination funding from the National Marine Fisheries Service, and IEP funding (Science) from U.S. Fish & Wildlife Service, U.S. Geological Survey, U.S. EPA, and National Marine Fisheries Service.

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